

BISAYAN FILIPINO AND MALAYAN HUMORAL PATHOLOGIES:
FOLK MEDICINE AND ETHNOHISTORY IN SOUTHEAST ASIA

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BISAYAN FILIPINO AND MALAYAN HUMORAL PATHOLOGIES:
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by

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To Dr. Douglas Gilbert Haring, Emeritus
Professor of Anthropology, who first
interested me in anthropology -- as he
did a legion of students at Syracuse
University. It gives me honor to
acknowledge here my indebtedness to this
extraordinary teacher, persistent and
productive scholar, and admired colleague.
Dághang salámat pára tanán, Manong.

PREFACE

When this manuscript was first called to my attention, in my "confundity" I reacted with the query -- What is humoral pathology? I have no doubt that other readers will also discover humoral pathology by reading Donn Hart's delightful and informative cross-cultural analysis of this phenomenon. The Cornell Southeast Asia Program takes great satisfaction in making this study available to students of Southeast Asia, both for their education and entertainment.

Frank H. Golay

Cornell University
Ithaca, New York
January 1970

FOREWORD

This Data Paper could not have been written without the cooperation of numerous persons. The first to receive credit are the barrio folk of Caticugan and Lalawigan. Since detailed information on Christian and, especially, Moslem Filipino folk medicine is scarce, I imposed on colleagues who had done research in the Philippines for data from their unpublished field notes. Their response was most generous. For this reason, some material in this study comes from personal correspondence with the following anthropologists: George Appells, Brandeis University; William Goeghegan, University of California, Berkeley; F. Landa Jocano, University of the Philippines; Thomas Kiefer, Indiana University; Harry Nimmo, State College of Los Angeles; and Richard Lieban, National Science Foundation, Washington, D.C.

The world-wide scope of this report was the source of some personal trepidation. I am hugely indebted to George Foster, University of California, Berkeley, for his expert counsel and criticism of drafts of this study. Tom Harrisson, Southeast Asia Program, Cornell University, first drew my attention to the hot-cold dichotomy that occurs among some primitive groups in Borneo; he furnished references and critical comments on this section. Charles Leslie, New York University, offered helpful suggestions on many aspects of this study. Data for Iloilo and Negros Oriental provinces were furnished by Mr. and Mrs. José P. Bernardo who made several trips in Negros Occidental province solely to obtain requested information.

This publication has profited from the critical comments of still others: Fred Eggan, University of Chicago; Chester Galaska, Ithaca College, New York; John Musgrave, Library, University of Michigan; Arthur Rubel, University of Notre Dame; and Daniel Scheans, Portland State College. Morton Netzorg, Detroit, Michigan, improved the lucidity of both my style and thought.

Grateful acknowledgment is also made to the author's capable research associates in Caticugan and Lalawigan: Mr. Dioscoro Ragay, Miss Ramona Ragay, Mr. Isidro Somoza, Jr., and Mr. Felipe Dala. Mr. Roy Montes obtained some data from

informants in Boroñgan *poblacion*. Research in Penang was facilitated by the generous cooperation of Mr. Kok-Sue Choong.

Research in the Philippines was made possible by Fulbright Research Fellowships in 1950-51, 1955-57, and 1964-65.

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INTRODUCTION

Greek humoral pathology, based largely on the Hippocratic concept of the four humors, was brought to Spain by its Moslem conquerors. This medical complex later diffused from Spain to Latin America during the Conquest, and has been extensively described in the literature for this area. In contrast, this Data Paper is the first detailed report on this complex in another Hispanicized part of the world--the lowland Philippines. Not only were the Moslems responsible for the diffusion of humoral pathology to Spain but they also carried this disease concept and associated curing techniques to another part of Southeast Asia, Malaya.

Two basic problems are dealt with in this Data Paper. First, an analysis of the role of the humoral complex, especially the hot-cold syndrome, in Bisayan Filipino and Malayan folk medicine, both based on field research. Second, to explore this medical system's involved cultural history. The first purpose requires little comment since its ethnographic nature is as obvious as is its contribution to a fuller understanding of Filipino and Malay disease concepts and treatment. The second purpose requires some explanation. One cannot assume that the humoral complex of Bisayan Filipinos is simple a Spanish contribution. This assumption's plausibility is greatly enhanced for the Spaniards introduced the humoral complex to Latin Americans and also made significant changes in Philippine culture and society. This study explores the possibility that this aspect of Bisayan folk medicine may have borrowed less from the Spaniards and more from indigenous Southeast Asian, Indian, Arabian, and Chinese sources. More questions are raised in this enquiry than are answered; the final solution requires new field research.

A brief summary of the classical Hippocratic system, and its subsequent modification in Latin America, is presented first for later comparative purposes.

HUMORAL PATHOLOGY: CLASSICAL AND LATIN AMERICAN

Greek humoral pathology, based on the Hippocratic doctrine of the four humors, was elaborated by the Roman physician Galen. Such famous Arab physicians as as-Razi (Rhazes: 841/50-903/06 A.D.) and Avicenna (980-1036/37 A.D.) later made additional developments of this doctrine. Although the medicine practiced by the Arabs was chiefly of Greek origin, it had also absorbed some Indian and old Persian elements.¹ In fact, it is doubtful if Hippocrates "fully expounded" the doctrine of humors that is regarded as an essential part of his medical system.² Humoral pathology was later "transmitted to Spain when the country was dominated [8th to 11th centuries] by the Moslems."³

The concept of the humors and the physiological results of their disturbance waso". . . the chief pillar of the [western] medical temple for the next two thousand years, and became [and remained] part of the current speech of European people.⁴ A 12th century translation of Avicenna's *The Canon of Medicine* (*Qānūn*), based on the achievements of the early Greek physicians (some of whom had rejected the humoral system), was a basic text in European universities for cen-

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1. E.O.G. Browne, *Arabian Medicine* (Cambridge: University Press, 1962), pp. 44, 65.
 2. Donald Campbell, *Arabian Medicine and Its Influence on the Middle Ages* (London: Kegan Paul, Trench, Trubner and Company, 1926), 1, p. 4.
 3. George M. Foster, *Tzintzuntzan: Mexican Peasants in a Changing World* (Boston: Little, Brown and Company, 1967), p. 185. Although many sources refer to "Arab medicine," it was neither Moslem nor exclusively the achievement of the Arabs. However, from the 9th to 14th centuries--the *Pax Mongolica*--Arabic became the language of international Eurasian science. Pierre Huard and Ming Wong, *Chinese Medicine* (London: World University Library, 1968), p. 92.
 4. Henry O. Taylor, *Greek Biology and Medicine* (New York: Cooper Square Publishers, Inc., 1963), p. 19.

turies. The doctrine remained unchallenged until, in the 16th century, Paracelsus began his medical lectures with the ceremonial burning of the works of Galen and Avicenna.

The basic functions of the body were believed regulated by the humors--blood, phlegm, yellow bile, and black bile. The humors had "complexions" with characteristics or qualities of fire, earth, water, and air (vapor). Whereas blood was hot (warm), phlegm was cold and wet, yellow bile was hot and dry, and black bile was cold and dry.¹ Phlegm had no specific location in the body, but blood was centered in the liver, yellow bile in the gall bladder, and black bile in the spleen.² Each quality's intensity, in both the classic theory and in Latin America, was ranked from one to four degrees. For example, "'Cold' and 'dry' vinegar was described as F₁S₂, or *frío* in the first (and least) degree and *seco* [dry] in the second degree."³ Not only humans but "medicines, foods, and most natural objects also had complexions, based on pairs of the qualities of temperature and degree of moistness."⁴

Good health required a person to maintain his individual balance of the four humors and their qualities, whereas sickness was the result of a humoral imbalance and extremes of hot and cold, dry and wet. One's humoral equilibrium could be influenced by the seasons, wind, mode of living (e.g., diet), age, and climate.⁵ The first step in diagnosis was to determine the complexion of the disease, or its etiology, and the natural humoral balance of the patient.⁶ The purpose

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5. Taylor, *op. cit.*, p. 18.
 6. Browne, *op. cit.*, p. 121.
 7. George M. Foster and John H. Rowe, "Suggestions for Field Recording of Information on the Hippocratic Classification of Diseases and Remedies," *Kroeber Anthropological Society Papers*, 5 (1951), p. 1.
 8. Foster, *Tzintzuntzan*, p. 185.
 9. Benjamin L. Gordon, *Medicine Throughout Antiquity* (Philadelphia: F. A. Davis, 1949), p. 509.
 10. William Madsen, *Mexican-Americans of South Texas* (New York: Holt, Rinehart and Winston, 1964), p. 71. These people also believe that strong emotions may upset the humoral balance and result in illness. Also see Ari Kiev, *Curanderismo: Mexican-American Folk Psychiatry* (New York: The Free Press, 1968), p. 46.

of treatment was to restore to normalcy the disturbed humoral balance of the sick person.¹¹ "This was accomplished by such devices as diet, internal medicines, purging, vomiting, bleeding, and cupping."¹²

When the Spanish conquest of the New World began¹³. . . a an extremely complex humoral pathology constituted the theoretical framework for scientific (but not popular) Spanish medicine. . . . The conceptual framework of humoral pathology for medicine, and the complexions of plants and animals, was brought to America at the time of the Conquest, and American plants heretofore unknown in Europe were quickly classified¹⁴. In Spain humoral pathology appears to have been part of the Great but not the Little Tradition.

In sixteenth-century Spain the 'hot-cold' concept, in more sophisticated form, represented the best medical practice and belief, as derived from the Hippocratic concept of humoral pathology. Perhaps because there was already a vigorous and satisfactory body of popular medical belief and practice in Spain, it seems not to have spread to the folk level. Presumably this medical knowledge came to America on an elite level, filtered in simplified form to the folk, and with the general receptivity to new elements that characterized the New World, was avidly taken up.¹⁵

The New World acceptance of this humoral doctrine probably was facilitated by preadaptive indigenous elements. According to Currier, the hot-cold principle was present in both Maya and Inca medicine.¹⁶ Some, however, believe that

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- 11a George M. Foster, "Relationships Between Spanish and Spanish-American Folk Medicine," *Journal of American Folklore*, 66 (1953), p. 203.
 - 12. Foster, *Tzintzuntzan*, pp. 185-86.
 - 13. *Ibid.*, p. 186.
 - 14. George M. Foster, *Culture and Conquest: America's Spanish Heritage* (New York: Wenner-Gren Foundation for Anthropological Research, Inc., Viking Fund Publications in Anthropology, No. 27, 1969), pp. 20, 14-15.
 - 15. Richard L. Currier, "The Hot-Cold Syndrome and Symbolic Balance in Mexican and Spanish-American Folk Medicine," *Ethnology*, 5 (1966), p. 252; and also John Gillin, *The Culture of Security in San Carlos. A Study of a*

reports of an indigenous hot-cold syndrome in such accounts as Sahagún may actually be intrusive European influence.⁶

In the process of its adoption in Latin America, the humoral pathology system of the Spaniards was considerably simplified. First, the qualities of wet and dry disappeared. Second, the degrees of intensity of these qualities were rarely retained. For example, in San Francisco Tecospa, Mexico, the four degrees for coldness remain but only two degrees for hotness.⁷ Finally, a new category, *templado* (temperate or regular) was added, referring to foods and remedies that were neither hot nor cold but neutral.⁸

Originally, and normally in Latin America, the hot-cold nature of various foods and medicines was not determined by "physical temperature and [had] nothing necessarily to do

Guatemalan Community of Indians and Ladinos (New Orleans: Middle American Research Institute, Publication No. 16, Tulane University, 1951), p. 32.

16. Isabel Kelly, *Folk Practices in North America. Birth Customs, Folk Medicine, and Spiritualism in the Laguna Zone* (Austin: Institute of Latin American Studies, Monograph No. 2, University of Texas Press, 1965), p. 119. "Not long ago, Robertson . . . emphasized the danger of 'important if not massive unrecognized components of Hispanic thought and influence' in even such assumedly 'native' sources as Sahagún's Nahuatl texts."
17. William Madsen, "Hot and Cold in the Universe of San Francisco Tecospa, Valley of Mexico," *Journal of American Folklore*, 68 (1955), p. 125. In Middle America two degrees of hot and cold are recognized, Richard N. Adams and Arthur J. Rubel, "Sickness and Social Relations," No. 62, *Offprint Series* (Austin: Institute of Latin American Studies, The University of Texas, 1967), p. 342.
18. Madsen, *op. cit.*, p. 125; Foster, "Spanish-American Folk Medicine," p. 204; Foster, *Tzintzuntzan*, p. 187, Foster and Rowe, *op. cit.*, p. 1. In Chan Kom some foods are "half-cold" or intermediate, Robert Redfield and Alfonso Villa Rojas, *Chan Kom: A Maya Village* (Chicago: University of Chicago Press, 1962), p. 161. In parts of Mexico, *irritante* is substituted for *caliente* (hot) and *fresco* may be used instead of *frío*. "The word 'fresco,' however, may occur with 'frío,' indicating a lesser degree of 'cold' than the latter." Foster and Rowe, *op. cit.*, p. 1. In Northern Mexico "fresh" foods may also be "cold." Kelly, *op. cit.*, p. 80.

with physiological effect; from a scientific viewpoint, the attribution of a substance to one or the other of these categories may be purely arbitrary.¹⁹ In Chan Kom, the hot-cold categories are regarded as "'natural' physiological principles," involving neither the will of man nor supernatural forces.²⁰

The Latin American classification of some hot and cold medicines and foods may be determined by their exposure to the sun or water.²¹ In parts of Mesoamerica, for example, animals that usually live in the water (e.g., frog) are regarded as cold because of their habitat.²² Furthermore, pork may be both hot and cold, depending upon whether and how it is cooked.²³ In general, however, classification usually is independent of such visible traits as form, color, texture, and physical temperature; the hotness and coldness of a substance is descriptive only of its effects upon a person who eats it.²⁴

Normally before an illness can be treated in Latin America, its hot or cold classification must be determined. Following the principle of opposites, a disease believed hot will be treated with cold herbal remedies and the patient advised to eat mainly cold foods.

'Blood' dysentery comes from hot foods, and one should take 'fresh' [cold] things to cure it.²⁵

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19. Foster and Rowe, *op. cit.*, p. 1.
 20. Redfield and Rojas, *op. cit.*, p. 163.
 21. Madsen, *op. cit.*, pp. 125-27. Also Charles Wisdom, "The Supernatural World and Curing," in Sol Tax (ed.), *Heritage of Middle America* (Glencoe: The Free Press, 1952), p. 130; and Ozzie G. Simmons, "Popular and Modern Medicine in Mestizo Communities of Coastal Peru and Chile," *Journal of American Folklore*, 68 (1955), p. 61.
 22. Wisdom, *op. cit.*, pp. 130, 134.
 23. Currier, *op. cit.*, p. 256.
 24. *Ibid.*, p. 251. Also John Gillin, *Moche: A Peruvian Coastal Community* (Washington, D.C.: Institute of Social Anthropology, Publication No. 3, Smithsonian Institution, 1945), p. 53.
 25. Kelly, *op. cit.*, p. 80; Arthur J. Rubel, "Concepts of Disease in Mexican-American Culture," *American Anthro-*

Charles Leslie (personal communication) states that some Mexican curers avoid giving cold remedies for a hot sickness on the grounds they "shock the system"; instead they use bland remedies with some cooling agents.

The classification of many foods, diseases, and medicines as hot, cold or neutral by contemporary Latin Americans is variable "and general agreement among all people even in a single town is not the rule."⁶ Pork is classified as hot in San Carlos and cold in Moche.⁷ Yet Foster found general agreement in Tzintzuntzan regarding each of many foods.⁸ Currier, with some exceptions, found a similar classification in his research area.⁹ For Latin America there is a much greater correspondence between the classification of herbs, according to classical authorities, than of foods.

Not only humans, foods, and medicines are classified by the hot-cold syndrome but also natural objects. For example, in San Carlos, a Guatemalan community, pinewood, cotton cloth, humans, and the sun are hot, whereas all metal, pottery, the moon, and corpses are cold.¹⁰ Finally, real temperatures of hot and cold also affect the humoral balance and may result in sickness.¹¹

With this short sketch of the Hippocratic system of medicine, both in its original form and the Latin American variants, the Philippine data can be comparatively analyzed.

pologist, 62 (1960), pp. 795-814. A hot sickness may require a cold medicine that is then followed by a hot medicine to provide a counter-balancing effect. *Ibid.*, p. 799.

26. Foster, "Spanish-American Folk Medicine," p. 205.
27. Gillin, *San Carlos*, p. 32.
28. Foster, *Tzintzuntzan*, p. 187.
29. Currier, *op. cit.*, p. 256.
30. Gillin, *op. cit.*, p. 31.
31. Nathan L. Whitten, *Guatemala: The Land and People* (New Haven, Conn.: Yale University Press, 1961), p. 226; Currier, *op. cit.*, p. 251; Foster, *Tzintzuntzan*, pp. 188-89.

PHILIPPINE RESEARCH AREA

Background

For more than three centuries (1521-1898) the Philippines was a Spanish possession in Southeast Asia until it was won by the United States during the Spanish-American war. From the middle 16th to the late 19th centuries Filipinos were subjected to selected aspects of Spanish culture. For the greater part of this period, the Philippines was administered from Mexico. In addition, most Spaniards came to the Philippines via Mexico; the Cape of Good Hope route was not used until the late 18th century. The trans-Atlantic crossing was so strenuous that most of them spent at least six months recuperating in Mexico. Although the actual time required to sail from Spain to the Philippines, via the Atlantic and the Pacific, was eight months, the trip seldom took less than two years. For these reasons, Filipinos probably were also exposed to certain features of the hybrid Spanish-Indian (Mexican) culture then developing in Mexico.

The Philippine Literature

A search of the available literature shows that the concept of humoral pathology had been reported in the Philippines as early as the 18th century. Beyond this, however, the data are extremely limited. Printed studies of contemporary Filipino peasant society, including those focused on traditional medicine, throw little light on this aspect of rural life.

In the first part of the 18th century, Pablo Clain, a Jesuit, published *Remedios Fáciles para Diferentes Enfermedades* (*Easy Remedies for Different Sickneses*).² One chapter of

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1. John Leddy Phelan, *The Hispanization of the Philippines: Spanish Aims and Filipino Responses, 1565-1700* (Madison: University of Wisconsin Press, 1959), pp. 42-43.
 2. Pablo Clain, S.J., *Remedios Fáciles para Diferentes Enfermedades* (Manila, 1712), xxxi, 298 pp. Another edition of this book, published in Manila in 1857, had 638

Remedios was titled: "*Señales para Conocer si la Enfermedad es de Calor o de Frío*" ("Signs by which to Know whether the Sickness is of Heat or of Cold"). Another source contains brief references to this subject, but associates these beliefs with the Chinese, not Filipinos. The quotation below is from a 19th century publication on the Philippines, here translated from the French.

The Indians [Filipinos] claim that air plays an important role in all sicknesses, and the Chinese add that it is the lack of a balance between cold and hot and the perpetual struggle between these two principles that causes all the disturbances that afflict the harmony of the human body.³

Later the same author notes that various hot-cold remedies are prescribed to a patient to restore the hot-cold balance ("*rétablir le bon accord*") of the body. Fruits and other plants were known as either hot or cold.⁴

Several references to the hot-cold system for the contemporary Philippines were located in the sources examined. For example, in early 20th century Obando, a municipality near Manila, some foods were classified as cold. A new mother avoided such cold foods as eels, oysters, and the

pages. Bantug states this work was finished in 1708, and copies of the manuscript probably circulated privately before its publication. Also see Sixto de los Angeles, "*El Folklore Medico en Filipinas*" (typescript, ca. 1930), in the private library of Mr. Morton Netzorg. José P. Bantug, *A Short History of Medicine in the Philippines During the Spanish Regime, 1565-1898* (Manila: Colegio Medico-Farmacéutico de Filipinas, Inca, 1953), pp. 11-12a Bantug, quoting José Rizal, writes that the latter stated that "*El aire, el calor, el frío, el vapor de tierra y la indigestión, son la únicas causas patógenas que se admiten en el país*" ("Air, heat, cold, mist, and indigestion are the sole pathogenic causes admitted in the country [Philippines]")^a *Ibid.*, p. 12.

3. Jean B. Mallat de Bassilan, *Les Philippines: Histoire, Géographie, Moeurs, Agriculture, Industrie et Commerce des Colonies Espagnoles dans l'Océanie* (Paris: A. Bertraud, 1846), 1, p. 51.
4. *Ibid.*, p. 52.

patola Squash for "The 'cold' foods are supposed to induce stomach pains."⁵

The most detailed account of this aspect of Philippine folk medicine was found in a 19th century Spanish novel, *Sin Título* (*No Title*).⁶ Selected passages, translated from the Spanish, are given below in a somewhat abbreviated form. In this novel, a Chinese physician, Tiang-Song, is asked to examine an ailing young *mestiza*, Charing. When her father, Don Anselmo, requests Tiang-Song's diagnosis, he replies:

"'Heat!!'

'How?' said Don Anselmo. . o . 'Do you feel hot? Bah! The windows shall be opened in this house! . . .'

'No . . . I say what the girl has is . . . heat! Do you see, Charing? It is necessary that you become cool . . . that you not eat spiced foods . . o and above all that you not eat eggs, nor *pansit* [noodles usually cooked with diced meat], nor piquant fruits. . . o What you have is heat! And it is understood. . . .'

'Tell me,' asked Don Anselmo gravely, 'what causes earthquakes?'

'Heat!' answered the Chinese. . . .

'That's it!! . . . now I understand. . . o The earthquakes are hot . . . the heat escapes . . . we catch it or it catches us . . . and . . o now I believe! I am such a fool. . . . Feel my pulse, dear Tiang-Song. . . .'

Don Anselmo unbuttoned his silk vest and coat and sat beside his daughter. . o .

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5. Paula Malay, "Some Tagalog Folkways," *The University of Manila Journal of East Asiatic Studies*, 6 (1957), p. 74. To avoid cholera, Filipinos were also advised not to eat green fruits "especially the cold ones like melons, *camias*, *balimbing*. . . n" Bantug, *op. cit.*, p. 37. The *camias*, or *kamias* (*Averrhoa bilimbi* Linn.) is a fruit introduced to the Philippines from tropical America. *Balimbing* (*Averrhoa carambola* Linn.) is another fruit of New World origin. Eduardo Quisumbing, *Medicinal Plants of the Philippines* (Manila: Technical Bulletin 16, Bureau of Printing, 1951), pp. 438-41.
 6. Francisco de Paula Entrala, *Sin Título* (Manila: Ramírez y Giraudior, 1881), pp. 40-45o

'What do I have?' asked Don Anselmo at last. . . .

'You . . . cold!'

'The young are hot . . . the old are cold . . . the earth is hot . . . the air is cold . . . the heat of the earth gives heat . . . cold of the air, cold. . . . What is good for you, for me is bad. . . . The human body is not constant. . . . Always different. . . . This one has blood . . . that one none . . . here yes . . . there no . . . this one strong . . . this one weak!'

'Yes, that's it. . . . Now I see it clearly. . . a . And believe me I had a moment of perplexity and disappointment. . . . Because I was telling myself that the sickness of my daughter came from the earthquake. . . .'

'Ah, no! That is something else!'

'Ah, understood, understood . . . Senor Tiang-Song . . . therefore there are two. . . . One of the fright (*susto*) and another of the heat and of heat and of cold. . . . It is clear. . . . That is why the Spaniards, when they experience fright, say: *noase acalore usted* [do not heat yourself]. . . .'

'And please tell me, Senor Tiang-Song, can Charing take chocolate?'

'Ah! no, hota'

'And mangoes?'

'Also hota'

'And eggs?'

'Ah, no . . . hot.'

'And ice cream?'

'Ice cream . . . yes . . . because it is cold! . . a'

'Chicken, hen? . . . That cannot harm her?' asked Don Anselmo.

'Why not? Hot! *Lechon* [roast suckling pig] is good, *tajuri* [a white gelatinous food sold by the Chinese], the *atole* [a ground corn gruel], the *nido* [bird nest], squash . . . are good for her.'"

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7. One purpose of Entrala, who arrived in Manila in 1873, in writing *Sin Título* was to ridicule the popular *mediquillos* of 19th century Manila. Wenceslao E. Retana, *Noticias Históricas-Bibliográficas de el Teatro en Filipinas Desde Sus Orígenes Hasta 1898* (Madrid: Libreria General de

In summary, the preceding information indicates clearly that the concept of humoral pathology, with its associated hot-cold syndrome, existed in the Philippines as early as the 18th century.^a The paucity of data on this topic, however, does not permit any detailed reconstruction of this medical system.^a The fuller significance of this material will be discussed later.

Bisayan Folk Medicine

The field research data for this section were obtained in the Bisayas, a major cluster of Philippine islands south of Luzon and north of Mindanao.^a Bisayan Filipinos include Cebuans (Cebuanos or Sugbuanons) who are the most numerous cultural-linguistic group, both in this area and for the Philippines. They inhabit Cebu, Bohol, Siquijor, western Leyte, and eastern Negros. Panayan Filipinos (Ilongos or Hiligaynons) occupy most of Panay and western Negros. Samarans (Samareños or Waray-waray) live in Samar and eastern Leyte.

Barrio Caticugan, the Cebuan village studied in 1951 and 1964-65, is located in Siaton municipality.^a Siaton, a relatively sparsely settled municipality, is situated at the southern tip of Negros Oriental, one of the two provinces of Negros Island.^a Caticugan is one mile north of the largest settlement (Siaton *población*) in the municipality. No feeder road connects this village with the national dirt road that passes through the poblacion, connecting southern Negros with Dumaguete, the provincial capital, about 35 miles to the northeast. In 1965 Caticugan had 732 inhabitants.^a Their major economic activity is subsistence farming; they grow both corn and rice. All residents are Roman Catholics whose mother tongue is Cebuana.

Victoriano Suarez, 1909), pp. 108, 110. A *mediquillo* was a "simple practitioner with some notions of medical science . . . a little or petty physician." José Núñez, "Present Beliefs and Superstitions in Luzón," in Emma H. Blair and James A. Robertson, *The Philippine Islands, 1493-1803* (Cleveland, Ohio: A.A.H. Clark, 1903-1909), 43, p. 314.

When doing research for this article, the author was corresponding with a former student, Dra Lilia Hernández-Chung, whose dissertation was on Spanish language novels published in the Philippines.^a Dr. Hernández-Chung drew my attention to this novela

The second community investigated (1956) was Barrio Lalawigan in Samar. Lalawigan is an agricultural-fishing village of 1,225 people (1960 census) situated in eastern Samar. Boroñgan, the provincial capital of Eastern Samar, one of the three provinces of the island, is about five miles north of Lalawigan. All villagers are Samaran-speaking Roman Catholics. They, like the barriofolk of Caticugan, reside mainly in nipa palm thatched bamboo dwellings built upon piles, without electricity or running water. Indeed, the peasants of Caticugan and Lalawigan share many characteristics: most were born in the village they now live in, or in one nearby; mate selection is localized; social organization is based on bilateral principles; subsistence agriculture (and fishing to a lesser degree) is their major economic activity; and they each compose a single socio-economic group.

The humoral pathology of Bisayan Filipinos cannot be meaningfully described apart from their total folk medical system. Only the barest outline of this topic can be presented in this Data Paper.

Bisayan Filipinos support at least two, often competing, medical systems. When ill, they may consult both the indigenous shaman and the western trained physician. Certain illnesses are assigned to such natural causes as overeating, poor diet, excessive drinking, physical abuse of the body, infections, and accidents. Such ordinary ailments normally are treated with home remedies. Other illnesses are believed caused by supernatural agents. There are the invisible spirits "who replicate the life of the peasants but possess supernatural powers denied most humans."⁸ Sickness and death may also result from the actions of angered ancestral spirits, witches, persons with the evil eye, or the lethal bite or powers of preternatural animals.

If the patient either does not recover or worsens, he seeks the advice of the various folk medical specialists. Depending upon the individual, his financial resources, and the illness, modern western drugs may be sought, including hospitalization in the provincial capitals. These two medical systems are not totally separated. Some physicians in Dumaguete accept aspects of the hot-cold syndrome, whereas traditional curers are not beyond recommending aspirin or giving their patients injections.⁹

8. Donn V. Hart, "The Filipino Villager and His Spirits," *Solidarity*, 1 (1966), p. 66.

9. Donn V. Hart, Phya Anuman Rajadhon, and Richard J. Coughlin, *Southeast Asian Birth Customs: Three Studies in Human Reproduction* (New Haven, Conn.: Human Relations Area Files, Inc., 1965), p. 21.

A variety of traditional curers, including shamans, both diagnose and treat the sick. Some part-time specialists limit their practice to specific types of afflictions, e.g., boils, fractures, bones or food lodged in the windpipe, sickness caused by fright, by supernaturals, etc. Although the etiology of an illness may be supernatural, herbal remedies can be used. Other forms of treatment are massage, "fumigating" the patient with incense, prayers at both the household altar and the church, magical incantations, amulets, food offerings to the spirits and ancestral souls, and a few modern drugs.

Shamans often diagnose sickness by feeling the patient's pulse. According to a Cebu City curer, "The pulse is the best spot to tell the illness of the patient because it is an outlet, a 'substation,' of the heart. If the pulse lies, then the heart lies."¹⁰ A Lalawigan shaman said an ill person's pulse may be hot or cold, depending on the type of sickness. A healthy person has stabilized his unique balance of hot, cold, and air elements in the body. When the body becomes too hot (or too cold), the velocity of the blood's circulation is increased (or decreased). Loss of appetite and general malaise occurs, lowering the normal defenses against illness. The shaman most respected by Caticuganers claimed he could diagnose the sickness of a villager by feeling the pulse of the messenger who came to fetch him to the patient. The messenger's pulse duplicated the abnormal beating of the sick person's pulse, although he did not contract the latter's illness.

Latin American and Philippine folk medical complexes assert that exposure to excessive real heat or cold is harmful. The following paragraph, written about Tzintzuntzan, is largely true in Caticugan and Lalawigan.

Heat may attack the body following exposure to high temperatures such as the rays of the midday sun, a hot bath, and radiation from a cooking fire or pottery kiln. Heat may also attack the body as a consequence of strong emotional experiences such as anger, fright, envy, or joy (which are classified as 'hot' experiences, from injudicious ingestion of hot foods and drinks, and from the emanations believed to be given off by a corpse).¹¹

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10. Richard W. Lieban, *Cebuano Sorcery: Malign Magic in the Philippines* (Berkeley: University of California Press, 1967), p. 82.
 11. Foster, *Tzintzuntzan*, p. 188. Among the items used in the posthole ceremony for a new Caticugan residence are

In Lalawigan, however, great fright or joy are regarded as cold not hot experiences.

A woman in Caticugan reportedly became blind because she constantly baked rice cakes in an outdoor oven, and failed to protect her eyes from the fire. In Caticugan illness may occur if a female irons clothing (using a charcoal iron) and immediately afterwards washes her hands in cool water. Sudden changes in the weather, "strong winds and vagrant breezes," vapors that rise from the ground when the sun appears after a lengthy rain, simultaneously eating or drinking certain hot and cold foods, or exposure to the night air are alleged causes for illness in Caticugan and among other Christian Filipino groups.²

In Malitbog, a predominantly Protestant village in Panay, the residents believe that overexposure to the sun or heat from the kitchen cooking fire turns a mother's milk rancid; as a result her nursing infant may become ill with a stomach-ache or loose bowels.³ In summary, both metaphysical and real hot and cold temperatures, when absorbed by the body in excessive amounts, result in sickness.

One feature of the "complexion" of the humors, in the classical sense, was their quality of air or vapor. Both

small *lag-it* (Ceb. hard and sharp) stones. These stones, always under water in the river, are believed to guarantee that future occupants of the dwelling will have a "watery, cold mind," i.e., will not be quick to anger. Donn V. Hart, *The Cebuan Filipino Dwelling in Caticugan: Its Construction and Cultural Aspects* (New Haven: Cultural Report Series, Southeast Asia Studies, Yale University, 1959), p. 35.

12. George M. Guthrie and Pepita J. Jacobs, *Child Rearing and Personality in the Philippines* (University Park: The Pennsylvania State University Press, 1966), pp. 130, 132; Hart, Rajadhon, and Coughlin, *op. cit.*, p. 13; Lieban, *op. cit.*, p. 81; Ethel Nurge, "Etiology of Illness in Guinhangdan," *American Anthropologist*, 60 (1958), pp. 1161-62. In Caticugan and Lalawigan, a person may become ill when exposed to heat and then subjected to cold, a condition called *pasma*. In Lalawigan air, or wind blowing from the forest, is considered cold, whereas wind coming from the sea is hot.
13. F. Landa Jocano, *Growing Up in a Philippine Barrio* (New York: Holt, Rinehart and Winston, 1969), p. 35.

Latin Americans and Filipinos accept the possible baneful effect on their health of air or wind (Sp. *aire* or *mal aire*).⁴ Among Filipinos air (Cebu and Sam. *hangin*, also meaning wind) may produce illness in two basic ways. First, exposure to a normal draft or breeze may bring illness, e.g., a cold. If one absorbs excessive amounts of hot or cold air, the balance of these principal elements in the body may be disturbed. The Caticugan mother wraps the navel of her infant with a cloth to prevent air from entering its body through this alleged aperture. Coconut oil in which *pauli* roots have soaked is rubbed on the skin to keep "the wind from penetrating one's pores." Air circulates in the veins. Dr. Jocano writes that the barriofolk of Malitbog believe that if hot air is absorbed through the pores and carried by the blood to the brain cavity, mental illness may occur in which the victim becomes extremely hostile.

A second association of air, or wind, with illness is that it may be the means by which the spirits (Ceb. *ingkanto*) propel thorns, pebbles, bones, or other foreign objects to penetrate magically the body. Many aches and pains in Caticugan and Lalawigan are the result of the spirits' "missiles" "shot" by air into one's legs and arm joints.⁵ The Balangiang Samals have the same troubles with their *jin*.

Dr. Jocano reports that "All diseases, for the farmers of Malitbog, are caused by either supernatural beings or by the unbalanced relationship of elements inside the body due

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14. Gillin, *San Carlos*, p. 107; Whitten, *op. cit.*, p. 226. Many Middle American Indians believe that *aire* may be self-activating or used by the spirits as a vector. Adams and Rubel, *op. cit.*, p. 338. Among Mexican-Americans, good health". . . is the result of perfect equilibrium between these internal humors and *aires*, as well as between man and his family, and between man and God.⁶ Kiev, *op. cit.*, pp. 43, 46, 131.
 15. F. Landa Jocano, "Cultural Perception of Food and Its Implication for Technological Change: A Case Study," delivered at the seminar on Production of Protein-Rich Foods from Local Sources, [Manila: 1968], mimeographed. The data for this paper were collected in Tuburan, Iloilo province, Panay, a "progressive Bisayan agricultural village" and Santolan, Rizal province, Luzon, "a rapidly industrializing Tagalog community."⁷ Tagalogs call this type of illness *inakyatan ng masamang hangin sa ulo* (bad air entered the head), *ibid.* p. 9. Also see Nurge, *op. cit.*, p. 1164.

to the imbalance of the elements in the body by air or the overconsumption of cold or hot foods¹⁶ The relationships between excessive exposure to hot and cold air and disease concepts among Bisayan Filipinos are more complicated than this short summary indicates. For example, a Cebu City *mananambal* (traditional curer) told Dr. Lieban that a person who has eaten spoiled food becomes vulnerable "to a wind containing both hot and cold elements."¹⁷

Filipinos in Tuburan, Santolan, Caticugan and Lalawigan also associate hotness with the supernatural. These villagers usually erect their dwellings only on cold sites. Building a residence on a hot location would bring sickness and bad luck to the occupants. There are numerous techniques to select a proper location. In Tuburan, a carabao (water buffalo) is staked on a prospective site. The new building is constructed only on the spot where the animal finally lies down to rest since this area is regarded as cold (*mahamog*).¹⁸

One of several ways Caticuganers determine if the environmental spirits approve a new housesite is to bury a green coconut in which the fluid inside cannot be heard when the nut is shaken. The next morning the nut is unearthed and shaken. If the liquid inside is heard, the area is regarded as hot, i.e., the spirits disapprove its use as a housesite.¹⁹

Bisayan Humoral Pathology

Some Cebuans believe that the body is composed of three or four elements--water, earth, fire, and wind--that have qualities of hot and cold. (A Tagalog informant told Dra Charles Kaut that the dead return to the four places of their origin--earth, fire, water, and wind.) On the whole, certainly in Caticugan and Lalawigan, this concept of the composition of the body is not widely known. On the basis of interviewing local informants and consulting available dictionaries, the Bisayan languages do not have a term for humor, in the Hippocratic sense.

16. Personal communication from Dra Jocano.

17a Personal communication from Dra Richard Liebana

18. Jocano, "Cultural Perception of Foods," p. 9.

19. Hart, *Caticugan Dwellings*, p. 31.

Bisayans do classify most foods, herbs, and diseases as hot, cold, or *natural* (Cebu Pan, and Sam, neutral or regular, i.e., neither hot nor cold).²⁰ "The two categories of food in Malitbog are the 'cold' and the 'hot' foods."²¹ Most informants in Caticugan and Lalawigan are unable to explain why foods or herbs are placed in these categories. When questioned, they usually replied: "I do not know" or "It is their nature (*birtud*)."²² (*Birtud*, from the Spanish, *virtud*, although translated as nature, may have an old Spanish meaning of *virtud*, as does the word in English, of power or strength.)

One elderly Lalawigan woman explained why she thought certain foods were hot or cold. When a person's blood circulates "fast and high [in pressure]," the individual is "constantly hot." When the blood's circulation is "slow and low, one is always cold." She speculated that maybe it is the same with other animals and plants, causing some to be hot and others to be cold.

It was not possible to discern any consistent scheme that governs the Bisayan hot-cold-regular classificatory system for foods, herbs, and diseases. The problem probably is one of taxonomy; there are too many items for too few logical categories, hence making fine discriminations is difficult. Bisayans, as do Latin Americans, classify some items according to their exposure to actual temperatures. One Cebuan informant told Dro Lieban that the carabao is hot since it always avoids the sun, seeking the shade or a cool, muddy waterhole. Fish are considered regular in Lalawigan but hot when dried since "They are placed under the sun." Salted fish are hot because salt is hot. (Some claim that imported salt is hotter than locally produced salt.) In Caticugan and among most Panayans, fish are put in all three categories, although they live in the water.

Sometimes one element of a food is crucial in its classification. According to a Caticugan informant, pork is cold because the meat contains fat and fat contains lard and

20o In Manalad, a village in southern Negros Occidental, certain foods are classified only as cold and "not cold" (possibly the *natural* category). If one eats a cold food when lacking adequate sleep, a stomach ache may result. Willis Sibley, "Manalad: The Maintenance of Unity and Distinctiveness in a Philippine Village" (Ph.D. thesis in anthropology, University of Chicago, 1958), p. 29o

21. Jocano, *Philippine Barrio*, p. 27.

lard is cold. In Tuburan and Santolan, on the other hand, "fatty and oily foods are considered hot."² Such modern drugs as vitamins, B₁ "shots," and aspirin could not be classified by most informants for lack of knowledge of their ingredients. Some, however, believed aspirin must be cold since it "cures fever."

Most Bisayans classify vegetables in all three categories. However, the barriofolk of Tuburan, Malitbog, and Santolan classify most vegetables as cold since their juice and fleshy parts supposedly cool the mouth and stomach. Fruits are largely cold, whereas most beverages are hot. (For alcoholic beverages, this classification probably reflects the belief that alcohol is hot.) Some Lalawigan residents claimed they could not classify soft drinks (Coke, etc.) because they did not know their ingredients. Several informants, however, thought Tru-Orange was cold since oranges are placed in this category. Oranges are also cold in Tuburan and Santolan.

Table 1 (see Appendix) presents the classification of foods for Barrio Lalawigan and Boroñgan, Eastern Samar; Barrio Caticugan, Siaton poblacion and Dumaguete; Negros Oriental; Iloilo and Negros Occidental provinces; a Cebuan barrio (Agusan) in northern Mindanao; and a Manila Tagalog informant. When available, the classification of foods by the barriofolk of Tuburan (Panayan) and Santolan (Tagalog) is also included. Table 2 (Appendix) gives more detailed information, limited to Caticugan and Siaton, on this classification of fish, including their local (and often scientific) names, frequency of catch, and class, i.e., desirability as food.³

The Spaniards introduced many New World plants to the Philippines. It was speculated that their Latin American hot-cold classification might have accompanied the plants when they crossed the Pacific Ocean. For example, chocolate is a New World plant introduced by the Spaniards to the Philippines. Chocolate is generally regarded as hot throughout Latin America and by Bisayans. (A Tagalog informant, however, classified chocolate as cold).

22. Jocano, "Cultural Perception of Food," p. 13.

23. Donn V. Hart, *Securing Aquatic Products in Siaton Municipality, Negros Oriental Province, Philippines* (Manila: Institute of Science and Technology, Monograph 4, Bureau of Printing, 1956), pp. 54-56.

Lack of adequate data made this investigation unproductive. For some introduced plants the Philippines and/or Mexican hot-cold classifications are unknown or given for only one region. Comparison is also handicapped by the use of local names; scientific identification, especially by specimen, is rare. Furthermore, disagreement occurs among Latin Americans and Filipinos regarding the classification of basic foods.

Existing classifications of foods, both for Latin America and the Philippines, are incomplete. The lists may not indicate, as Madsen found, if the food is *very* hot or cold. A fresh (*fresco*) category occurs in Mexico but is yet to be reported for the Philippines. Animals may be classified by parts not wholes. The head and flesh of a goat in Mexico is considered hot, whereas the blood and internal organs are cold. Cooking may modify a food's category: in one Mexican community raw garlic is very hot but when cooked it is only hot.²⁴ Some Filipinos classify meat differently if the animal is wild or domesticated, whereas fruits may be put in different categories based on whether they are green or ripe. These imprecise classifications, typical of many published lists of hot-cold foods, makes precise comparison hazardous.

It is believed these factors probably explain some disagreements over the classification of items in Table 1. For example, some Filipinos may have given a general classification for bananas and others may have been referring to a particular, or common, species. A Filipino may have classified the pig as hot, in regard to its fat, whereas another may have given cold in reference to its flesh. Finally, it is not known, except for Caticugan, Lalawigan, and the data furnished by Bernardo, if the classifications given represent unanimous or only majority opinions.

On the other hand, as research in Caticugan and Lalawigan verify, some differences in classification are not ethnographic error but differences of opinions. Although there are some broad principles that indicate a food's probable classification by the hot-cold system, in most cases the only way to determine the category is by experience--the reaction the food has on a healthy or sick person.²⁵ One of Jocano's informants did not know before eating dried shrimp if they were hot. "I knew about it only when welts and *butlig* (papule) came out. . . . We took a bath in the river

24. Madsen, *op. cit.* pp. 125-27; Currier, *op. cit.* pp. 253-56.

25. Currier, *op. cit.*, p. 253.

and slowly the discomfort disappeareda" The system appears productive and probably comprehensive for it includes relatively new items (aspirin and antibiotics) and such uncommonly eaten foods, for rural Filipinos, as the heron (*tungkago*) and geese--both regarded as cold by Agusan barriofolk

Nevertheless, it is apparent that most Bisayans and Tagalogs classify most foods by the hot-cold principlea Yet they (according to Table 1) agree on the classification of only a few foods: carabao and mongo beans are hot, whereas the cucumber, *kaimito* (sugar-apple)a, *guayabano* (soursop)a, and watermelon are colda

As the geographic scope of the hot-cold classification is narrowed, agreement increasesa Of the items listed in Table 1, Bisayans and Tagalogs agree on the classification of only six foods (7%)a for Bisayans (Cebuans, Samarans, and Panayans)a, the agreement rises to 27%. For only Cebuans (Barrios Caticugan and Agusan)a, there is a 35% accord in the classification of foodsa Finally, for Barrio Caticugan, the unanimity increased to 70% of the foods listed in Table 1.⁶

These figures suggest, on the basis of available data, that considerable disagreements on food classification probably exist among different Filipino cultural-linguistic groups, duplicating the Latin American situationa Extensive classificatory agreement probably is limited to the barrio, perhaps municipal level. If so, this factor suggests the relationships of food to the maintenance of good health and curing practices probably also varies significantly among these various Filipino groups.

Table 3 (Appendix) lists the hot-cold classification of various medicinal flora used by Samarans and Cebuansa The relatively high percentage of cold herbs suggests that among Samarans hot ailments may be more common than cold ones (see Table 4)a Habitat influences the classification of some herbsa

Table 4 (Appendix) lists some common illnesses according to their hot-cold classification in the Bisayas, and including one Tagalog (Santolan) communitya Although there is considerable disagreement among Bisayans regarding classification of fooda reading Table 4 across rows demonstrates the

26. For Bisayans and Tagalogs, only one Cebuan classification is available for two of the six foodsa For Bisayans, the classification of eight items in Table 1 is unknown for Panayans, in four instances different varieties of bananasa

remarkable agreement over the classification of the listed illnesses by the hot-cold principle.

This article does not attempt a comprehensive catalog of all illnesses known in Caticugan and Lalawigan, their classification and associated treatment. Folk remedies for several hot-cold illnesses are offered only for illustrative purposes. Bisayans, on the whole, regard boils and most skin diseases as the result of excessive body heat; in its effort to escape, the heat produces external eruptions and swellings. Accordingly, the patient should avoid hot foods and take regular early morning baths. In Caticugan cold *mayana* and *sentimento* leaves are placed in water that is later drunk by the patient. Cold *atis* (sweetsop) bark may also be applied to the boils. For some skin diseases, the roots and bark of the cold *sibukao* are dried, powdered, mixed with coconut oil, and applied. This salve then may be covered with cold *labnog* leaves.

For smallpox one purposely drinks a hot concoction, e.g., *tubâ*⁷ mixed with eggs, for one day, once in the morning and again in the evening. The heat of this drink "drives out" the pox ("even the intestines have smallpox") causing skin eruptions. The sick person then switches to cold foods. One also bathes daily for three days with water in which sour *dum-on* and *libas* leaves have soaked. Beri-beri is caused by "excessive coldness entering the body." In Lalawigan, three varieties of beri-beri are recognized: 1) beri-beri *ha ginhawa* (of the stomach); 2) beri-beri *ha tol-an* (of the bones); and 3) beri-beri *ha panit* (of the skin). Although cold foods are avoided, so are some hot foods, e.g., *tubâ* chocolate, carabao, and salt.

Since foods are classified as hot, cold, or regular, it is possible to lessen their qualities by mixture. For example, Tepoztecan believe "Foods may be neutralized--that is, made less dangerous--by mixing certain 'hot' foods with certain 'cold' foods."⁸ Although this culinary practice was not investigated in either Lalawigan or Caticugan, Jocano reports similar beliefs for the Bisayan and Tagalog communities studied. Beans are considered hot; when cooked they are mixed with cold green vegetables to achieve a balance. Most Santolan residents cook their vegetables with lard or oil (hot) to balance their cold traits. Excessive consumption

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27. *Tubâ* is an alcoholic beverage made from the sap of the coconut fruit bud.
 28. Oscar Lewis, *Tepoztlan: Village in Mexico* (New York: Holt, Rinehart and Winston, 1960), p. 12.

of cold vegetables may result in beri-beri, of hot meat, in rashes. The best way to prepare many foods is to blend them so a proper balance of their innate qualities is obtained--*kailangan katamtaman lang* (just enough is needed).²⁹

The preceding section sketches only the bold contours of Bisayan folk medicine in general and the hot-cold syndrome in particular. Fever, head-aches, some skin diseases, and mental illness may be caused either by a disturbed balance of body elements or by various supernatural agents. The role of air, and its interrelationships with the hot-cold syndrome, probably is more complicated than suggested.

Research indicates that the humoral pathology aspect of traditional medicine in Caticugan is less viable than in Lalawigan. This segment of Lalawigan folk medicine quickly became apparent, whereas many Caticuganers have only hesitant opinions or blurred ideas on this subject. Certainly Caticugan contrasts with Malitbog where Jocano reports only two causes of illness, the supernatural and the hot-cold complex. Future research may find, as in Latin America, this feature of Filipino folk medicine is erratically distributed throughout the Philippines.³⁰

A more comprehensive investigation of this aspect of Filipino folk medicine would facilitate our present understanding of this aspect of rural life and efforts to induce the peasants to accept modern medical concepts and practices. For example, a recent book states that

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29. Jocano, "Cultural Perception of Foods," pp. 12-13. Certain fish are considered hot by Santolan residents. "When cooking these fish, one should see to it that they are combined with food considered cold in order to neutralize their fatal effect on the body." Apparently this mixing of foods to neutralize their qualities is not done by the barriofolk of Tuburan.
 30. In one Mexican community, the people have only "vague concepts of sickness being caused by 'heat' and 'cold.'" Ralph L. Beals, *Cherán: A Sierra Tarascan Village* (Washington, D.C.: Institute of Social Anthropology, Publication No. 2, Smithsonian Institution, 1946), p. 202. Members of one upper class family in Peru "pay no attention to the traditional differences between 'hot' and 'cold' foods. . . ." E. A. Hammel, *Power in Ica: The Structural History of a Peruvian Community* (Boston: Little, Brown and Company, 1969), p. 69.

The stress Filipinos place on physical cleanliness, the primary importance of being clean-looking and clean-smelling--in their bodies, their clothing, and their homes--is certainly different from a health-oriented view of cleanliness since they are concerned with appearance and smell.³¹

For Bisayans, and one suspects for most Filipinos, bathing is explicitly "health-oriented." As already suggested, regular morning baths in Caticugan and Lalawigan are necessary to maintain the hot-cold balance of the body. Irregular bathing causes a "heating of the body; even the stomach boils." In Tuburan and Santolan frequent baths is one practical way to deal with a possible imbalance of hot-cold ailments, especially when eating large amounts of one of these foods, e.g., mangoes during their season, resulting in "mango rash."³²

In Malitbog, mothers do not mind if their children wear wet clothes after bathing in the river; this is not the way one catches a cold. Actually, the wet clothes may be beneficial for they both cool the body, reducing enlargements of the stomach caused by "'heat emanating from the body'" and hot food the person previously ate, thereby preventing loose bowels.³² In this regard Filipinos differ from Mexican-Indians who reject the value of daily bathing since it conflicts "with the principles of the hot-cold system."³³

Another applied value of increased knowledge of this hot-cold dichotomy is that innovations in nutritional education require an awareness of the peasants' ideas about the nature of food and its proper preparation. Jocano's informants recommend that beans (hot) always be cooked with a cold vegetable to achieve a balance of these two qualities. One Santolan mother blamed her small son's rash on failure to conform to this folk belief.

You see, the doctor said my child has beri-beri. It would be good for him to eat mongo beans. So I gave him mongos. Now see, he has a rash. You see, mongos are hot to the body. If you cook mongos you should mix them with tender leaves of whatever vegetables--like young leaves of ampalaya

31o Guthrie and Jacobs, *op. cit.* p. 132.

32o Jocano, *Philippine Barrion* p. 46.

33o Madsen, *op. cit.* p. 139.

or camote. But the doctor said I should not mix the mongos with anything. That is why the child has a rash.³⁴

It is apparent that numerous similarities link the humoral pathologies of the Spaniards, Latin Americans, and Christian Bisayan Filipinos. A plausible assumption to explain these resemblances would be that this aspect of Filipino traditional medicine was first introduced by the Spaniards, repeating a transmission of humoral pathology they accomplished in Latin America. During the several centuries the archipelago was a Spanish possession, lowland Filipino society and culture was considerably Hispanicized. Moreover, some of the parallels between Latin American, especially Mexican, and lowland Filipino traditional medicine might reflect the fact that most Spaniards who came to the Philippines, until the late 18th century, spend considerable time in Mexico before proceeding to Manila.

The following sections of this report explore alternative possibilities, that Filipino folk medicine may have drawn upon other sources, all of which are found in Indonesia. We shall deal with four possible sources. First, an indigenous Southeast Asian hot-cold system could have been a major factor in contributing to the conceptualization of contemporary Filipino folk medicine. Second, the Ayurveda medical system, remarkably similar to the Hippocratic complex, diffused from India to mainland Southeast Asia. Indian influence is known to have reached the Philippines. Perhaps what appears to be Hippocratic in Filipino folk medical concepts is actually of Ayurvedic origin.

A third possible source are the Arabs, and Southeast Asian converts to Islam; the former transmitted Greek humoral pathology not only to Spain but also to Malaya. These beliefs regarding the nature of sickness and its treatment might have entered the Philippine archipelago by its "back door," along with the Islamization of the peoples of Sulu and southern Mindanao. For this reason Filipino Moslem traditional medicine was also examined. Finally, Chinese and Vietnamese medicine, the latter borrowing heavily from the former, share certain parallels with humoral pathological principles. Chinese influence in the Philippines is of documented pre-historic origin.

The following sections do not attempt a comprehensive history or exposition of these various, complicated medical

34. Jocano, "Cultural Perception of Food," p. 11.

systems.^{3 5} The main purpose is to demonstrate the humoral features of these medical systems and their hot-cold syndrome; and, in a preliminary manner, to investigate the possibility they may have diffused to the Philippines. The search for an indigenous hot-cold syndrome in Southeast Asia was limited to Bornean and Philippine primitive societies. Malaya, and not Indonesia, was selected for this topic since personal research has been done on Malay folk medicine.

350 Research for these sections utilized materials in the Human Relations Area Files for Burma, Thailand, Malaya, Borneo, Vietnam, Philippines, and China. Additional information was sought by consulting basic, and specialized, bibliographies for Southeast Asia in general and the individual countries in particular. As mentioned in the Foreword, some data for Borneo and the Philippines were furnished by the acknowledged anthropologists from their unpublished field notes.

INDIGENOUS SOUTHEAST ASIAN

HOT-COLD SYNDROME

Sources on various Bornean primitive groups were searched to determine the possible presence of an indigenous hot-cold dichotomy or humoral pathology features of their traditional medicine. Most of these societies have been largely isolated from the main streams of Indian, Arab, Chinese, and Spanish influence in Southeast Asia. For primitive societies where this dichotomy occurs, no convincing evidence exists to date that the concepts were borrowed from these external cultural traditions.

No primitive Bornean society was located, in the sources examined, that systematically classifies foods, medicines, and diseases on a hot-cold basis. Bornean folk medicine does not appear to have any pronounced humoral qualities. When the hot-cold concept occurs, it is related primarily to the structure of the universe. For example, humans who disturb the world's hot-cold balance suffer sickness and other misfortunes. The Kelabit believe the universe is controlled by a hot-cold balance that began with a struggle between fire and water during the origin of the human world. They assert that humans, their domestic (but not wild) animals, dwellings, and personal possessions may petrify from intense cold if certain customs are violated.²

Williams reports that

The people [Dusun] of Sensuron [Sabah] feel that the state of the universe as well as omens of personal fortune are responsible for sickness. The condition of a 'hot universe' . . . is feared greatly since at such a time the 'fever of sickness' affects man, plants, and animals. When the universe is . . . 'cool,' then it is believed

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1. Some information on the Kelabit was obtained from Professor Harrisson through personal correspondence.
 2. Tom Harrisson, *World Within: A Borneo Story* (London: Cresset Press, 1959), pp. 114-16.

personal fortunes would be good and men can expect to be in good health and live to the limits of their fate.³

The Dusun also fear precipitation that occurs when the sun is shining. Such "hot rain" not only causes fatal fevers and jaundice but thea". . . evil spirits are much in evidence and particularly virulent during showers of this kind."⁴

The Rungus Dusun of Sabah (North Borneo) believe that illicit sexual intercourse creates heat that spreads in "an ever-widening circle involving the couple, their kin, and the community, so that illness and death increase, humans and animals fail to produce, crops wither and die, and the world itself becomes increasingly dry and hot."⁵ A major

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3. Thomas R. Williams, *The Dusun: A North Borneo Society* (New York: Holt, Rinehart and Winston, 1965), p. 34a If a kite, a red-colored bird (*Haliastur indus*), lights on an unfinished Dusun dwelling, the house is doomed supernaturally to destruction by the "'red-hot' . . . a quality inherent and conducted by the birda" Tom Harrisson, "Birds and Men in Borneo," in B. E. Smythies, *The Birds of Borneo* (Edinburgh: Oliver and Boyd, 1960), p. 23.
 4. Ivor H. N. Evans, *Studies in Religion, Folk-lore and Custom in British North Borneo and the Malay Peninsula* (Cambridge: Cambridge University Press, 1923), p. 175a The Negritos and Semai of Malaya share this belief. P. D. R. Williams-Hunt, *An Introduction to Malayan Aborigines* (Kuala Lumpur: Government Printing House, 1952), pp. 64, 72; and Robert K. Dentan, *The Semai: A Nonviolent People of Malaya* (New York: Holt, Rinehart and Winston, 1968), pp. 20-21a Dentan thinks the Semai concept of "hot rain" may be of Malayan origin. Also see George N. Appell, "A Survey of the Social and Medical Anthropology of Sabah: Retrospect and Prospect," *Behavior Science Notes*, 3 (1968), pp. 1-54a
 5. George N. Appell and Robert Harrison, "The Ethnographic Classification of Dusun-speaking Peoples of North Borneo," *Ethnology*, 8 (1969), p. 222a In a personal communication, Professor Appell added that if the people of a village suffer from an unusual number of colds, others may jokingly remark that the village is hot; if there is little sickness in the community, it is said to be cool. Alien traditions with the strongest impact on the Dusun-speaking people are, in order, Chinese, coastal Islam, and Western. No archaeological evidence has been found of Indian influence. *Ibid.*, p. 213.

wedding ritual is the sacrifice of a pig to "cool" the marriage; a similar ritual with the same purpose has been reported for other Dusun-speaking groups. Apparently the hot-cold dichotomy among the Dusuns and Kelabit is activated only by illicit sexual relations and the violation of various other mores that causes an abnormal heating or cooling of the universe.

Publications on various primitive Philippine groups do not report a hot-cold dichotomy or humoral pathology as part of their concepts of the universe or traditional medicine. Since these societies often retain features once typical of Christian Filipinos, a wide-spread occurrence of these beliefs would have strongly suggested their pre-Hispanic presence in the lowland. In summary, and on the basis of this survey, none of the Southeast Asian primitive societies examined in Borneo or the Philippines has a well-developed humoral pathology. Although a hot-cold dichotomy appears among some Bornean groups, no similar complex was found for primitive groups in Luzon or Mindanao.

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6. Of special assistance in this research for the Philippines was Shiro Saito, *A Preliminary Bibliography of Philippine Ethnography* (Manila: The Ateneo de Manila, 1967), mimeographed. Also see Anastacia Villegas, "Primitive Medicine in the Philippines," *Annals of Medical History*, 5 (1923), pp. 229-41. Professor Eggan reported these concepts were unknown among the primitive groups he had studied in north-central Luzon. Also see George M. Guthrie, *Impressions of Ifugao Health and Social Activities* (University Park: The Pennsylvania State University, 1964), mimeographed.

AYURVEDA: INDIAN HUMORAL PATHOLOGY

The Ayurveda medical system of ancient India, most similar to the humoral pathology of Hippocrates, spread throughout Asia, including mainland Southeast Asia. Since aspects of Indian culture reached the Philippines before the arrival of the Spaniards, the Ayurveda is another possible, if remote, contributory source to pre-Hispanic Bisayan folk medicine.

The striking convergency between various aspects of the Hippocratic and Ayurvedic medical systems has created a controversy over the possible Greek origin of the latter. Filliozat argues that, long before Alexander's invasion, scientific communication existed between India and Greece. "This is the explanation of why there are, between Indian and Greek medicines, so very particular and precise similarities which are not easy to ascribe to chance."¹

However, the uncertainty of the chronology of Hindu medical treatises makes it difficult "to determine the exact nature of any mutual influence."² Kutumbiah states that "the similarities [between the Greek and Indian systems] are superficial [and] the differences are fundamental."³ There are four Greek humors but originally only three Indian humors (*doṣas*); later blood was added as a fourth humor.⁴ The Greeks had four basic elements (earth, air, fire, and water), whereas the Ayurveda propounded five elements (*pañcabhūtas*); earth, air, fire, water, and ether. Finally, some argue that if the Ayurveda had been heavily influenced by Greek medical science, why did not the Indians borrow such starting originally

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1. J. Filliozat, *The Classical Doctrine of Indian Medicine: Its Origins and Its Greek Parallels*, translated from the French by Dev Raj Chanana (Delhi, India: Munshiram Manoharlal, 1946), p. 257.
 2. Henry R. Zimmer, *Hindu Medicine*, edited with foreword and preface by Ludwig Edelstein (Baltimore: Johns Hopkins Press, 1948), p. xlviii.
 3. P. Kutumbiah, *Ancient Indian Medicine* (Madras: Orient Longmans, 1962), pp. xli-xliia.
 4. Zimmer, *op. cit.* p. xlix; Kutumbiah, *op. cit.*, p. 62.

Greek medical concepts as the pulse lore or the belief that the brain was the central organ of thought and consciousness? Edelstein, therefore, writes that it isn't. . . safer to suggest 'an independent parallel growth and development of ideas, as they could easily come about with regard to the same subject and problem.'⁵

According to the Ayurveda the body is composed of the modifications (*dhātus*) of the five elements (*bhūtas*).^a The seven *dhātus*—blood, flesh, fat, bone, marrow, semen, and taste, are formed from ingested food. Health requires that the *dhātus* be maintained in proper proportions (*sama-yoga-vāhin*).⁶ As in Greek and Latin American humoral pathology, the *dhātus* & proportions constantly fluctuate, differing for each person. When the *dhātus* are in their normal measure, an equilibrium is created called *dhātu-samya*. In turn, the *dhātus* & equilibrium depends on the balancing of the *doṣas* or humors. The sole aim of Ayurveda is to prescribe diet, medicines, and a life way that maintains or, when necessary, restores an upset *dhātu-samya*.

Disease (*dhātu-vaiṣamya*) occurs when the balance of the five elements is disturbed. *Nidānas* or upsetting causes, may be the seasons, habitat, type of life, and especially diet. The *nidānas* do not produce sickness by themselves but by acting directly upon the *doṣas*. The vitiated humors, in turn, then act upon the *dhātus* causing disease in these bodily constituents.⁷ The disturbed humoral balance is restored not naturally but by diet, medicine, and a regimen of life. Once the patient's symptoms are recognized, and the role of the particular *doṣa* is determined, the function of treatment was to return the disturbed *dhātus* proportions to normalcy. Foods and drugs were classified in a great variety of ways, including hot, cold, dry, moist, etc.; hot substances were recommended for cold sicknesses and vice versa.⁸

5. Zimmer, *op. cit.* p. xlviii.

6. Kutumbiah, *op. cit.* p. 35; Filliozat, *op. cit.* p. 29; Zimmer, *op. cit.* p. lviii.

7. Kutumbiah, *op. cit.* p. 82.

8. Rustom J. Vakil, *Our Glorious Heritage* (Bombay: The Times of India Press, 1966), pp. 92-93; Filliozat, *op. cit.* p. 29.

THE HUMORAL PATHOLOGY OF THE BURMESE AND THAI

The Ayurvedic medical system diffused to Tibet, Mongolia, China, Japan, and Southeast Asia. At the start of this century, this Indian medical system spread from Mongolia to Russia where it is called "Tibetan" since its concepts first reached the Mongols through the Tibetans.¹ Of special concern to this study is the humoral pathology, primarily derived from the Ayurveda, of the Theravada Buddhist Burmese and Thai. Although no thorough study has been made of Burmese humoral pathology, its main contours can be sketched.

Burma

Forchhammer's claim that all Burman science, including medicine, was derived from India has been judged "exaggerated."² However, a recent and careful enquiry into folk medicine states that many Burmese medical books are based on translations of the Ayurvedic *śaṃhitās* of Susruta and Charaka.³ The following material indicates that the Burmese humoral pathology absorbed many basic Ayurvedic principles.

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1. Filliozat, *op. cit.*, p. 30.
 2. Emmanuel Forchhammer, *An Essay on the Sources and the Development of Burmese Law* (Rangoon: Government Printing, 1885), p. 21; and Melford F. Spiro, *Burmese Supernaturalism: A Study in the Explanation and Reduction of Suffering* (New Jersey: Prentice-Hall, 1967), p. 148. Although the Persians and Arabs had direct, if limited, commercial contacts with Lower Burma as early as the 9th century, it appears unlikely they contributed any of their medical knowledge to the Burmese. M. Sidiq Khan, "Muslim Inter-course with Burma (From the Earliest Times to the British Conquest)," *Islamic Culture*, 10 (1936), pp. 409-27.
 3. *Report of the Committee of Enquiry into the Indigenous System of Medicine* (Rangoon: Government Printing and Stationery, 1951), p. 5.

Most Burmese believe that the 32 component parts of the body are grouped under five elements (*dat*)^a earth (*pahtawi*)^q water (*aboq apaw* or *arbaw*)^q fire (*teizaw*)^q air or oxygen (*wayaw*)^q and ether (*agatha*)^a⁴ These elements, arranged on the opposite sides of the body, are also patterned differently for males and females. There are three humors (*dawthas*)^a wind (*lay*)^q bile (*thechi*)^q and mucus or phlegm (*thalait*)^a One humor may predominate or several may combine to produce disease; each humor may be excessive, retained, scanty, exhausted, or decomposed. Their exact status is determined by the age of the patient, symptoms of the disease, climate, day of the week, etc.⁵

For the Burmese, "Illness comes from throwing the locus and the amount of the elementals out of proper combination. . . . It is the proper balance of the elementals that is 'health' and disturbances of the balance that are 'ill health,' and medicine is a series of techniques to restore harmony and balance."⁶ When the earth *dat* (forming the

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4. Manning Nash, *The Golden Road to Modernity: Village Life in Contemporary Burma* (New York: John Wiley and Sons, Inc., 1965), p. 193. Scott lists the same elements but adds that ether was usually disregarded by traditional curers.^a Sir James Scott (Shway Yoe), *The Burman: His Life and Notions* (London: Macmillan, 1910), p. 418. Another source states a fifth *dat* is *akasaq* or the organs of the senses, e.g., eyes, ears, nose, etc. *Report of the Committee of Enquiryq* p. 16. This term is identical with the Sanskrit term for space or emptiness (*ākāśa* or *antariksa*)^q known in Burmese as *agathaa* Filliozat, *op. cit.q* p. 26. The Sanskrit term for wind or air is *vāyuq* fire, *tejas*; water, *ap*; and earth, *prthvīa*
 5. *Report of the Committee of Enquiryq* p. 17. Scott adds *thata*". . . it is important to know the precise time of a man's birth in order to know in what proportion the *dat* should be present." Scott, *op. cit.q* p. 418.
 6. Nash, *op. cit.q* p. 194. Also see Mrs. Ernest Hart, *Picturesque Burma: Past and Present* (London: J. & M. Dent and Company, 1897), p. 180a. It appears that traditional Laotian medicine also is based on a humoral pathology basis for their concept of disease includes the idea analogous "to the humors of European physicians a few centuries ago." Laotians believe the body is composed of such basic elements as air, water, and fire. Stomach ache is diagnosed as trouble with the air element, whereas fever occurs "because the fire element is too strong." Joel

bones, muscles, etc.) is disturbed, loss of strength, emaciation and diarrhea results. If the *teizaw* element, or bodily heat is upset fever or loss of appetite occurs. Various sicknesses are associated with the days of the week; if one becomes sick on Sunday, the cause is an excessive amount of the earth *dat* that creates an unhealthy state of the fire *data*⁷

Various "cold-and-hot-caused diseases" require "balance-restoring" foods and medicines. Traditionally there are 96 ailments that may result when the body's humoral balance is upset.⁸ As a result most foods eaten in Nondwin and elsewhere in Upper Burma fall into one of four classes. These classes are 1) *pu*, *sat*, and *hka* (different kinds of heat); 2) *cho*, *chin*, and *a* or *orae* (different kinds of cold); 3) *sein* bland taste; and 4) *ngan* and *hpan* neutral foods.⁹ Some foods are classified as both hot (cold) and bland. As in Latin America and the Philippines a food's category is not

M. Halpern *Laotian Health Problems* (Los Angeles: Laos Project Paper No. 19, University of California Department of Anthropology, n.d.), p. 20a

7. Keith N. MacDonald, *The Practice of Medicine Among the Burmese Translated from Original Manuscripts, with an Historical Sketch on the Progress of Medicine, from the Earliest Times* (Edinburgh: MacLachlan and Stewart, 1878), p. 22.
8. Hart *Picturesque Burma* p. 180a
9. Nash *op. cit.*, p. 195. Nash lists the classification of more than 50 Burmese foods. The Judson Burmese-English dictionary gives somewhat modified definitions of some of these terms. *Pu* and *sat* are hot but the former is hot, in the sense of warmth, whereas the latter is hot in taste or pungency. *Hka* defined as bitter could be associated with hot. Nash states *cho*, *chin* and *a* (or *orae*) are different kinds of cold; the dictionary defines *cho* as sweet, *chin* as sour and *a* (or *orae*) as cold. Nash defines *sein* as a bland taste the dictionary gives raw. Although *ngan* and *hpan* are listed as neutral foods their dictionary definitions are salty and astringent (slightly sour). Adoniram Judson *The Judson Burmese-English Dictionary* rev. and ed. by Robert C. Stevenson rev. and ed. by F. H. Eveleth (Rangoon: American Baptist Missionary Press, 1921), pp. 644, 355, 371, 299, 287, 158, 375, 322, and 684.

necessarily dependent on its physical taste, form, or texture.

Scott described two categories of traditional Burmese curers. One type is *dat sayas* (*hsaya*, expert or master), or dietists, who trust solely to regulating the patient's diet for restoration of the humoral equilibrium. The *beindawsayas*, the more numerous of the two, rely upon various drugs for treatment. Sometimes a *hsaya* combines both types of treatments.¹⁰

Thailand

The *Handbook on Thailand* notes that the Thai supposedly lack a single, consistent theory of the cause of sickness. It is quite possible that the absence of a unitary focus may be a function of our limited knowledge of this aspect of Thai traditional culture. For

Behind much of the diagnosis, explanation and cure of disease is the idea, not always clearly articulated, that the body [and all nature] is composed of the four elements--wind, water, fire and earth--and that sickness results from or is a symptom of imbalance in the proportions or arrangements of these elements. Imbalance of the body's wind is the explanation for fainting; earth in the joints, it is believed, results in rheumatism. Such imbalance may occur through magical or natural causes.¹¹

Thai folk medicine, borrowing heavily from the Ayurveda, also has absorbed Chinese elements, but the latter are difficult to document.¹²

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10. Scott, *op. cit.*, p. 418; *Report of the Committee of Enquiry*, p. 16.
 11. Lauriston Sharp (ed.), *Handbook on Thailand* (New Haven: HRAF, Inc., 1956), p. 489; Ernest Young, *The Kingdom of the Yellow Robe: Being Sketches of the Domestic and Religious Rites and Ceremonies of the Siamese* (Westminster: Archibald Constable & Co., 1900), p. 122; Dan B. Bradley, "Siamese Theory and Practice of Medicine," *Sangkham Sat Parithat* 5 (1967), p. 103 (reprinted from *Bangkok Calendar*, 1865).
 12. Kenneth R. Landon, *Thailand in Transition: A Brief Survey of Cultural Trends in the Five Years Since the*

There are two sets of Thai terms for the four elements.³

1. Air	Ākāśa	
(wind)	Lōm	Wayo
2. Earth	Din, Thīdin	Patawee
3. Water	Nam	Ahpo
4. Fire	Fai	Dechho or Dachho

Patawee is the Sanskrit/ *pratiwil* and *wayo* the Sanskrit/ *vayul*. The *thī* of *thīdin* comes from Chinese and is the basic term for earth used in Chinese religions. Since Thai words of Indian origin usually begin with the prefix *ah* or *a* (long *a*), *ahpo* may be a derivative. *Dechho*, or *dachho* (Thai, heat, fire, might, or power) is also suspected to be of Sanskrit origin.⁴

Both the Thai and Burmese believe that there are exactly 96 humoral ailments; these disabilities "are the inevitable result of any excess in the amount of any one of the primary elements."⁵ Actually, a deficiency of an element may also produce an abnormal equilibrium, resulting in sickness.⁶ If fire (or any of the other three elements) penetrates an individual, the excess deranges the healthy balance of the body. The victim becomes ill with fever, measles, smallpox, or other ailments. Internal disturbances may also upset the balance of the elements; for example, apoplexy results when the wind element, blowing from all parts of the body, concentrates on the heart.

Illnesses that are difficult to diagnose usually are blamed on the abnormal accumulation or deficiency of wind (or air) in the body.⁷ A common expression for sickness

Revolution of 1932 (Chicago: distributed by the University of Chicago Press [1939]), pp. 139-40a

13a The Thai terms in the second column are honorific words, whereas those in the first column are ordinary Thai. Bradley, *op. cit.*, p. 104a. The assistance of Professor Galaska on this section is gratefully acknowledged.

14a Antoine Cabaton, "Siam," in James Hastings (ed.), *Encyclopedia of Religion and Ethics* (New York: Charles Scribner's Sons, 1921), 11, p. 484.

15a Young, *op. cit.*, p. 122.

16a Bradley, *op. cit.*, p. 104.

17. Young, *op. cit.*, p. 122; Bradley, *op. cit.*, p. 104.

among the Thai is: "It is the wind."⁸ Thai medication "whether of mineral, vegetable, or animal origin, aims at adding to or taking away from the constitutive elements what they lack or what they have in excess."⁹ The four major categories of medicine (with numerous subdivisions) are those associated with fire, water, earth, and wind.¹⁰

Ayurvedic, Burmese, and Thai traditional medicine accept a causal relationship between the etiology of disease and the seasons, including each month. Each element is associated with certain months; during this period the element's influence predominates. Ailments blamed on excessive heat are more prevalent during the hot (dry) season, whereas those caused by water occur more frequently during the rainy part of the year.¹¹

Burmese, Thai, and Malay have synthesized with Ayurvedic and Hippocratic concepts the belief that the environmental and other spirits control the four elements of the body, and hence may cause illness by disturbing their balance. These preternatural beings also control the external elements that are directed, for cause, into the victim's body resulting in sickness or death.¹²

As spirits have control over elements of the world, they may control the elements of the body too. A spirit may cause a disproportion of some bodily element and bring on sickness. When this happens, the thing to do is to exorcise the spirits and expel them by incantation and the sprinkling of holy water which has been blessed by the monk.¹³

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18. Landon, *op. cit.*, p. 140.
 19. Cabaton, *op. cit.*, p. 484.
 20. Bradley, *op. cit.*, p. 105.
 21. Rudolf Hofauer, M.D., "A Medical Retrospect of Thailand," *The Journal of the Thailand Research Society*, 34, Part 1, (1943), pp. 193 ff.; Bradley, *op. cit.*, p. 103.
 22. Bradley, *op. cit.*, pp. 104-105; George L. Harris and Others, *Area Handbook for Thailand* (Washington, D.C.: U.S. Government Printing Office, 1966), p. 259.
 23. Kenneth R. Landon, *Southeast Asia: Crossroad of Religions* (Chicago: University of Chicago, 1949), p. 27. The Thai "attribute the non-equilibrium of the four elements and hence their illnesses to spirits, and

In summary, it is obvious that Burmese and Thai humoral pathology borrowed extensively from Ayurvedic doctrine. Available information on these two traditional medical systems is so meager that the probability of Chinese influence can merely be suggested. Sources that assert Chinese influence never offer any documentation. Until detailed field studies are made of Burmese and Thai folk medicine, more precise statements concerning possible relationships with external sources are inappropriate.

It is beyond the scope of this monograph to discuss extensively the agents and techniques by which Indian culture diffused to Southeast Asia, a subject of current dispute among scholars of this region.²⁴ Preceding sections of this study, however, have indicated (or implied) that in Latin America and parts of Southeast Asia, humoral pathology and Ayurvedic medical concepts were brought to these areas by members of the Great Tradition. Yet today these intrusive cultural elements are aspects of the Little Traditions of the rural population.

The spread of Hinduism-Brahmanism into Southeast Asia was basically ". . . an aristocratic process, [whereas] Buddhism involved cultural transfer at the popular levels."²⁵ Early Brahman immigrants often gained the favor of Southeast Asian nobility with knowledge of their Great Tradition-- mythology, law, royal genealogies, ritual, folklore, Sanskrit, etc. They were also involved in the "treatment of illnesses" and the "distribution of curative medicines."²⁶

consult the sorcerer rather than the doctor; besides the sorcerer is often the ordinary doctor." Cabaton, *op. cit.* p. 484.

24. D. G. E. Hall, *A History of South-East Asia* (London: Macmillan & Co., Ltd., 1964), pp. 17-18; D. G. E. Hall, "Recent Tendencies in the Study of the Early History of South-East Asia," *Pacific Affairs*, 39 (Fall and Winter 1966-67), pp. 339-48; John F. Cady, *Southeast Asia: Its Historical Development* (New York: McGraw-Hill, 1964), pp. 41-44; G. Coedès, *The Making of South East Asia*, translated by H. M. Wright (Berkeley: University of California, 1967), pp. 54-55.
25. Cady, *op. cit.* p. 43.
26. Gabriel Ferrard, "Le K'ouen-louen, et les anciennes navigations inter-oceaniques dans les mers du Sud," *Journal Asiatique* (1919), cited by G. Coedès, *The Indianized States of Southeast Asia*, edited by Walter F. Vella; translated by Susan Brown Cowing (Honolulu: East-West Center Press, 1968), p. 22.

Most aspects of the Great Tradition of India could not have been transmitted to Southeast Asia by the uneducated Dravidians involved in the trading activities between the two regions. However, Ayurvedic medicine probably was, as it is today, widely known in village India--unlike the situation in rural Spain. These Indian sailors and traders, therefore, could have introduced basic Ayurvedic concepts to port city Southeast Asians. However, mastery of the esoteric doctrines of Ayurveda required extensive specialized training and knowledge of the literature; these features of the medical complex must have been brought to Southeast Asia by other agents.

If the Brahmans exposed Southeast Asian nobility to Ayurvedic practices, this elite probably encouraged Ayurvedic specialists to come to their courts as resident physicians. The "Indianization" of Southeast Asia was partly the result of the initiative of Southeast Asians. Furthermore, ". . . n Indian medicine could incorporate indigenous anatomical and physiological speculations and each country's recipes for cures [more easily than could] mathematics and other sciences of a universal nature [that] did not lend themselves to local variation."⁷

Ayurvedic knowledge could also have reached members of the Southeast Asian elite through translations of Indian texts. Indian medicine, for example, is traditionally believed to have been introduced into Thailand by Thai translations of the medical treatises of Khomarabhacca who lived during the time of Buddha.⁸ If this hypothetical reconstruction of the major modes of transmission of Ayurvedic medicine is valid, the next question is how these concepts diffused outward from the elite and the court circles to the Little Tradition of the villagers.

It is believed that one group of mediators between the Great and Little Traditions in Burma and Thailand were the Buddhist monks. They have always acted, as they do today, as medical therapists. Unlike the aristocratic, pollution-haunted Brahmans, they had intimate contacts not only among local court circles but with the peasants. In addition, Buddhism's introduction to Southeast Asia was mainly ". . . by South-East Asians, notably Mon monks, who went to Ceylon to study, to collect canonical texts, and to receive orthodox

27. Coedès, *Making of South East Asia*, p. 226.

28. Cabaton, *op. cit.* p. 484. Khomarabhacca wrote under the name of Rokhanithan.

ordination.²⁹ While in Ceylon they could have been exposed to Ayurvedic specialists and texts whose knowledge they later propagated among the faithful in their homelands.

In summary, it is possible that the religious in both regions, the Buddhist monks in Southeast Asia and the Catholic priests in Latin America, and perhaps also the Philip-pines, played a crucial role in linking these intrusive elements of the Great Traditions with the Little Traditions of the indigenous populace of the countryside.

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29. Hall, *History of South-East Asia*, p. 22a Also see Charles Leslie, "Professional and Popular Health Cultures in South Asia: Needed Research in Medical Sociology and Anthropology," in Ward Morehouse (ed.), *Understanding Science and Technology in India and Pakistan*, Occasional Publication No. 8 (Albany: Foreign Area Materials Center, University of the State of New York, 1967), pp. 27-42.

ARABS, ISLAM, AND MALAY HUMORAL PATHOLOGY

The Arabs, including South Asian Moslems, transmitted a classical humoral pathology to the Malays. It was hypothesized that the Arabs, and especially Islamicized Southeast Asians (Malays and Indonesians in particular), might have been agents for diffusing similar medical concepts to Moslem and Christian Bisayan Filipinos.

Before the days of the Prophet, Arab merchants sailed Southeast Asian waters en route to Cathay. The earliest known Arab contacts in Malaya occurred in the 7th century. By the end of the 9th century, Moslem traders were living in coastal Malay towns and marrying local women. Some became shahbandars, establishing centers of Islamic learning, associated with local court circles, and imported Moslem scholars and holy men.

Information on the role of the Arabs in transmitting their humoral pathology directly to Malays is both explicit and detailed.

Arabic works on medicine have been translated into Malay, and there may be read learned discussions on the parts and functions of the human body, which, in point of scientific accuracy, are of the age of Galen and Aristotle.

Malays believe the body is composed of four elements--earth, fire, water, and air (wind). Malay medicine is based on the fundamental principle of 'preserving the balance of power' among the four elements. This is chiefly to be affected by constant attention to, and moderation in, diet. To enforce these golden precepts, passages from the Korān

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1. S. Q. Fatimi, *Islam Comes to Malaya*, Malaysian Sociological Research Institute, Ltd. (Singapore: Malaya Publishing House, Ltd., 1963), pp. 69, 99-100; Hall, *History of South-East Asia*, pp. 190, 202-203.
 2. W. M. Maxwell, "Shamanism in Perak," *Journal of the Straits Branch of the Royal Asiatic Society*, 12 (1884), p. 222.

are plentifully quoted against excess in eating or drinking."³ Commenting on Newbold's remarks, Skeat wrote 60 years later "The foregoing quotation shows that the distinctive features of the Aristotelian hygienic theory, as borrowed by the Arabs, did eventually filter through (in some cases) until they reached the Malays. Such direct references, however, to Greek theories are of the rarest character, and can hardly be considered typical."⁴

The Malay *bomora* or traditional medical specialist, treats illnesses resulting from an excess of bodily humors with various foods and drugs; their qualification⁵. . . a into hot, cold, moist, and dry, and the compounds such as cold and warm, warm and humid, cold in the third degree, etc., is elaborate."⁶ For example, betel leaf is warm in the first degree and cold and dry in the second degree. This is the first appearance in Southeast Asia of the Hippocratic degrees of intensity of the qualities of the humors.

The primary elements, as in Thailand, are also associated with spirits (*jin*)⁷ Disease may be brought by the spirits springing from, or presiding over, the four elements. *Jins* of the air cause wind-borne diseases, of the earth, vertigo, of the fire, fever, etc.⁸ Each Kelantan Malay has a personal *jin*.⁹ Without the consent of this *jin* those spirits associated with the four elements are powerless to harm.

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3. T. J. Newbold, *Political and Statistical Account of the British Settlements in the Straits of Malacca, viza Pinang, Malacca, and Singapore: With a History of the Malayan States on the Peninsula* (London: John Murray, 1839), 2, p. 351.
 4. Walter W. Skeat, *Malay Magic: Being an Introduction to the Folklore and Popular Religion of the Malay Peninsula*, with a preface by Charles O. Blagden, originally published in 1900 (New York: Dover Publications, 1967), p. 409.
 5. John D. Gimlette, *Malay Poisons and Charm Cures*, 3rd ed. (London: J. A. Churchill, 1929), p. 35.
 6. *Ibid.* pp. 31, 33.
 7. Richard Winstedt, *The Malay Magician Being Shaman, Saiva, and Sufi*, rev. and enl. ed. (London: Routledge and Kegan Paul, 1961), p. 101.

Humoral Pathology in Telok Kumbar, Penang

In 1956 the humoral pathology of residents in a Malay village in Penang was investigated. Telok Kumbar, a fishing village of nearly 1000 people (1956), is located about 13 miles outside of Georgetown, the port city of Penang, Malaysia. A paved road runs past the village; bus service between the city and Telok Kumbar is excellent. A small commercial center clusters on both sides of the road, consisting of food stores, a small Chinese pharmacy, a tailor and coffee shops, and a bus station. The village also had Malay and Chinese schools, and a small marketplace.

Most people in the village made their living by fishing; the beach at the edge of Telok Kumbar was lined with small fishing boats, many with outboard motors. Telok Kumbar was a pleasant-appearing nucleated village with white sandy paths and community wells; coconut and rambutan trees surrounded neat wooden pile dwellings with palm thatched roofs. Most houses had electricity and some families owned radios. Only one Indian family resided in the village.

Telok Kumbar residents share the same basic humoral pathology previously described for Malays. They accept the disturbance of the four elements in the body as a major cause of illness. Most sicknesses are classified as hot or cold. Food and medicine is classified as hot (*hangat* or *panas*), cold (*sějok*), and regular (*sedang* or *suam*).⁸ For hot illnesses, cold foods and remedies are prescribed, and vice versa. Informants in the village, however, had no knowledge about the various intensities of the hot-cold qualities. A Penang informant claimed no Malays in this general locality classified hot or cold by degrees. Possibly this aspect of their original humoral pathology has been dropped by many Malays today as in most of Latin America and, apparently, in the Philippines.

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8. For additional meanings of these words, see Richard Winstedt, *A Practical Modern Malay-English Dictionary*, 4th ed. (Kuala Lumpur and Singapore: Marican & Sons, Ltd., 1964), and *Collins Malay Gem Dictionary, Malay-English: English-Malay* (London: Collins, 1964). *Hangat* supposedly is used more commonly in northern Malaya than *panas*. A knowledgeable Penang Malay informant claimed *sedang* means "fair" and should not be translated as "regular". It was he who suggested *suam*; however, *sedang* was the word given by the villagers. Other meanings for *suam* are "tepid" or "luke-warm."

Some, but not all, foods have the additional qualities of *angin* (air, breeze, or flatulence) and *bisa*. Although one meaning of *bisa* is "poison," in this context the term is best translated as "allergic" or "produces an ill effect." A fruit's flesh may lack *bisa* but the seed or juice possess this quality, e.g., the seeds of the jackfruit or the sticky milk of the *lanzones*. Food with *bisa* must be avoided, regardless of its other qualities, when one has specific illnesses that *bisa* aggravates. Some fish (*terubok* and ray-fish) and duck eggs have both *angin* and *bisa*; for a person with a skin disease, eating these foods would worsen the disease since *bisa* is "antagonistic" to skin ailments. If one is not afflicted with a skin disease, the *bisa* quality of these two foods has no affect. *Bisa* does not increase or decrease the coldness or hotness of any foods.

Table 5 (Appendix) lists various vegetables, fruits, meat, eggs, and spices according to their hot-cold-regular, *angin* and *bisa* qualities in Telok Kumbar. These qualities are believed to be "the will of Allah"; typically, they are usually independent of any intrinsic characteristics of the foods. Most fruits are cold yet two rather similar fruits, *lanzones* and *rambutan*, are, respectively, hot and cold. Brown sugar is cold, with *bisa*, rock sugar, simply cold, and white sugar, hot (or regular) with *angin*. Originally, the classifications were made on the basis of personal experience. For example, the mangosteen is cold if eaten one feels colder than if one had not eaten the fruit. The effect is said to be faster during the evening than the day. As Table 5 indicates, the classification of foods in Telok Kumbar, as in Latin America and the Philippines, is not always unanimous for each item.

Table 6 (Appendix) classifies many of the common sicknesses known in Telok Kumbar as whether they are hot or cold. The local *bomor* said "smallpox is not a Malay disease because it came from India." For fractures, one should avoid for one year cold foods, for eating them delays the knitting of the broken bone. Given this concept of sickness and remedies, an epidemic may assume additional economic significance. A Penang flu epidemic (1956) so abnormally increased the demand for cold fruits and vegetables sold in the marketplaces that

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9. Another definition of *bisa* is "painful," see John D. Gimlette, *A Dictionary of Malayan Medicine*, ed. and completed by H. W. Thomson (London: Oxford University Press, 1939). Some informants claimed only cold foods have *bisa*. In Table 5, ten foods are listed as possessing *bisa*; of these seven are cold and three are hot (with two hot foods also classified as regular).

throughout the island their regular prices were greatly inflated for several months.

Excessive *angin* in the body causes specific illnesses generically known as *penyakit angin*. For example, *penyakit angin litasan*, the Malay equivalent for stroke, occurs when too much *angin* collects in the body. However, no classification was attempted of the various types of *penyakit angin*.

A new mother's diet is rigidly prescribed in Telok Kumbar until the confinement ends--40 days after the delivery for a boy, 44 for a daughter. The woman's puerperium diet is a simple fare of hot foods. She must not eat vegetables, whereas raw chicken eggs, pounded salted fish, and honey are recommended. (Some mothers arrange the egg shells by the bed to keep track of the length of the confinement.) During delivery, only certain membranes are believed affected. If one were to eat cold foods, the whole body would be weakened; in such cases cold foods could result in convulsions.

Both the Malays in Telok Kumbar and those living in southern Thailand regard pregnancy as hot and the subsequent puerperium as cold. In southern Thailand a new mother and her husband avoid "certain types of goods considered 'cold' (for example, most vegetable foods). . . . During pregnancy she was not allowed to eat 'hot' foods, such as meat and some fruit." ¹⁰

Moslem Filipinos of Mindanao and Sulu

Although the Philippines is known as the "only Christian nation in Asia," a large Moslem minority lives in the southern part of the archipelago. Since Arabs and Islamicized South Asians carried the classic humoral pathology to Malaya, we hypothesized that they might also have been the agents of transmission to the Philippines. Unfortunately, reliable published sources on Moslem Filipinos (*Moros*) are scanty, so that data on their folk medicine are extremely meager. However, it was possible to secure additional information on the disease concepts and curing practices of some Moslem Filipinos from anthropologists who recently returned from the field. This section reports what is known about the humoral pathology aspects of the traditional medicine of four Moslem Filipino societies.

100 Thomas M. Fraser, Jr., *Fishermen of South Thailand: The Malay Villagers* (New York: Holt, Rinehart and Winston, 1961), p. 60.

The Magindanao, Maranao, Tausug, and Samal compose four of the seven major Moslem Filipino groups inhabiting the Sulu Archipelago and south-central Mindanao¹. The Magindanao are concentrated in Cotabato province, Mindanao, whereas the Maranao are found around Lake Lanao, south-central Mindanao. As to Sulu, the Tausug are the only ethnic group on Jolo, although they are also found on adjacent islands, including Basilan and Palawan, and the eastern coast of Malaysian Borneo. The Samal are divided into two branches, the Eastern and Western Samal. The Eastern Samal are culturally distinct, in language, history, and economics, from the Western Samal that include the Bajau.

Islam penetrated the southern Philippines at the end of the 14th century. Kiefer states that Islam was introduced to Jolo, the major island of the Sulu Archipelago, by three different groups: "Arab traders and adventurers, Chinese Moslems, and Sūfī missionaries from Malaya and Sumatra, and possibly south China."² By the time Islam reached the Philippines, the religion's original form had been modified by passage through Persia, India, Malaya, and Sumatra. "The fact that many of the traditions came via Malaya meant that it [the religion] was presented in a cultural and institutional form which was readily understood by the [Filipino] converts."³

The most detailed published (but itself brief) study of Moslem folk medicine concerns the Magindanao of Cotabato. This source discusses their theories of the causation of disease, its treatment, and various medicines, but makes no

11. Most of the general information on Moslem Filipinos in these paragraphs is summarized from Thomas M. Kiefer, *Tausug Armed Conflict: The Social Organization of Military Activity in a Philippine Moslem Society* (Chicago: Philippine Studies Program, Department of Anthropology, University of Chicago, Research Series No. 7, 1969), and Peter G. Gowing, *Mosque and Moron: A Study of the Muslims in the Philippines* (Manila: Philippine Federation of Christian Churches, 1964). Another source consulted was Thomas M. Kiefer and Stuart A. Schlegel, *Selected Bibliography: Philippine Moslems* (Chicago: Philippine Studies Program, University of Chicago, 1965), mimeographed, 16 pp.

12a Kiefer, *op. cit.*, p. 10a

13a *Ibid.*, p. 11.

reference to a humoral pathology or a hot-cold dichotomy.^{d⁴} No hot-cold classification of foods, medicines or diseases is mentioned. Magindanao traditional medical theory shares one feature of Roman, Chinese, Ayurvedic, Burmese, and Thai medicine. All these systems associate disease with different seasons, months, and days.^{d⁵} The Magindanao believe a sickness beginning on Monday is caused by wind; on Tuesday, by water; on Wednesday, by sun, etc.^{d⁶} Yet this source does not state or imply that wind, fire, or sun (heat) are believed to be humoral elements of the body, the equilibrium of which is identical with health.

A recent publication on the Maranao includes a short chapter by a Maranao sociologist on their folk medicine.^{d⁷} This makes no mention of a hot-cold syndrome or humoral pathology concepts in their traditional medicine. Although the reference is tantalizingly brief, the Maranao believe one element, *bisa*, of either an organic or inorganic nature, is a causal agent of sickness. *Bisa* a quality that Malays also assert is inherent in some foods, aggravates illness when eaten.

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- 14o Liborio Gomez, "Mohammedan Medical Practices in Cotabato Province," *The Philippine Journal of Science* 12-B (1917), pp. 261-80. Other sources consulted without profit for Moslem Filipinos were: Philip F. Harvey, "Native [Moslem] Practice in the Philippines, with Introductory Observations," *The New York Medical Journal*, 74 (1901), pp. 203-11; J. Franklin Ewing, S.J., "Birth Customs of the Tawsugs, Compared with Those of Other Philippine Groups," *Anthropological Quarterly* 33 (1960), pp. 129-33; J. Franklin Ewing, S.J., "Food and Drink Among the Tawsug with Comparative Notes from Other Philippine and Nearby Groups," *Anthropological Quarterly* 36 (1963), pp. 60-70; Dolores Ducommun, "Sisangat: A Sulu Fishing Community," *Philippine Sociological Review*, 10 (1962), pp. 91-107.
 - 15o Kutumbiah, *op. cit.*, pp. 132-33. Charaka divided the year into six seasons (cold, spring, rainy, etc.). Since one cause of sickness was varying annual temperatures, during the rainy season one should avoid sleeping by day and should eat certain foods.
 16. Gomez, *op. cit.* p. 265.
 - 17o Mamitua Saber and Abdullah T. Madale, "Health and Medical Problems Among the Maranaos," in Antonio Isidro and Mamitua Saber, *Muslim Filipinos* (Marawi City: University Research Center, Mindanao State University, 1968), pp. 84-93.

Harry Nimmo spent two years studying the Bajau (Badjaw), or "sea gypsies," of the Sulu Archipelago.¹⁸ His anthropological research, with extensive investigation of illness and curing, was done among the Bajau of Tawi-Tawi and Sibutu Islands. The Bajau of Tawi-Tawi are a nomadic boat people, whereas those living on Sitangkai have almost completely abandoned the boat-dwelling life. Sitangkai Bajau are thoroughly acculturated to Islam. Some Bajau groups in Zamboanga and Jolo live exclusively on boats, although the majority occupy pile dwellings built over the sea when they are not on fishing trips.¹⁹ On the whole, however, the Bajau are on the fringe of Islamic tradition in Sulu. Nimmo found no humoral pathology or hot-cold dichotomy among these people who attribute almost all sickness to the spirits.²⁰

Professor Kiefer spent two years (1966-68) studying the Tausug of Jolo.²¹ "Approximately fourteen months were spent in intensive participant observation in a single community located in the municipality of Luuk in the easternmost part of the Island of Jolo. . . . The remaining time was spent in travel throughout Sulu, several months residence in Bun-bun . . . and several months residence in the Luuk municipal center and the town of Jolo."²² Although his research was focused on a totally different topic, Kiefer did not encounter any humoral pathology or hot-cold syndrome concepts.

It is only among the Eastern Samal that a definite hot-cold syndrome appears as part of Moslem Filipino traditional medicine. Professor William H. Geoghegan spent nearly one year studying the Balangingi, an Eastern Samal group who lives in Barrio Tagtabon on Tictauan island, about six miles off the east coast of Zamboanga City.²³ The following data on Samal folk medicine, supplied by Professor Geoghegan, applies primarily to the Balangingi who currently are the politically dominant Moslem group in the Zamboanga area. They also fill most of the major Islamic religious roles in the locality, including those in communities of mixed cultural-linguistic groups.

18a Harry Nimmo, "The Bajau of Sulu--Fiction and Fact," *Philippine Studies*, 16 (1968), pp. 772-73a

19a Harry Nimmo, "Social Organization of the TawiaTawi Badjaw," *Ethnology*, 4 (1965), p. 421.

20a Kiefer, *op. cit.*, p. iiia

21a Professor Geoghegan wrote that although his research was mainly concerned with other areas of Samal culture, "I did conduct a brief (two or three months) training study in Samal disease concepts."

The Balangingi' Samal have four major disease (*saki*) or sickness categories: 1) swelling (e.g., small boil, goiter, smallpox, etc.); 2) pain/ache (e.g., headache, stomach ache, etc.); 3) hot/heat (e.g., smallpox, gangrenous erysipelas, etc.); and 4) cold (e.g., malaria, chills, measles, etc.).²² Occasionally a wet/dry distinction appears in some aspects of their folk medicine. There are also some diseases that do not fit into any of these broad categories. Although these categories are regarded as separate, they are also linked, in pairs, in terms of etiology, symptoms, and treatment.

A union exists between hot/heat (*saki pasur*) and swelling (*saki bahar*) illnesses. For example, a Balangingi' explains "The reason it gets red, the reason it swells, because heat gets in." Most hot diseases occur because "heat gets into the body." The categories of cold (*saki haggut*) and pain/ache (*saki piddin*) sicknesses are also joined. "We here, if our stomach aches, sometimes we're caused first to drink hot water. Something to get out the chill (cold)" Some ailments, such as pneumonia, associated with fever, are said to be cold. In general, treatment for hot/heat and swelling sicknesses is something cold, to eliminate the heat that results in the ailment. Cold remedies vary from various foods and herbs to smoking menthol cigarettes or resorting to ancient magical spells of the cold variety. For the second linked pair of disease categories, pain/ache and cold, the usual treatment is heat, e.g., wrapping the patient in a blanket, drinking warm water, or taking hot (or bitter) foods and/or medicines.

An essential aspect of Balangingi' folk medicine is the concept of *sukang*, the opposite of medication (*tambal*). *Sukang* is a quality that aggravates various sicknesses. Most diseases have *sukang* as well as *tambal*; and these supposedly have opposite effects on the course of the illness. According to the patient's sickness, some foods regularly eaten must be avoided because of their *sukang* quality. Generally *sukang* shares the same hot-cold features as its associated diseases. Certain foods that cause sickness (e.g., eating low-tide sea products may result in a stomach ache) are not classified as *sukang*. Some kinds of behavior not associated with eating or food are treated like *sukang*. If one has a mild cold, he should avoid being "hit by the rain" since this may complicate his ailment.

22. Smallpox is both a "swelling" disease because of its pustules and a hot disease since excessive internal body heat produces the eruptions.

The Balangingi' do not appear to classify foods on a hot-cold basis. When one is ill, however, certain foods must be avoided because of their *sukang* relationship with a particular disease, not because of any metaphysical hot-cold quality. The *physical* quality of a food is relevant (e.g., the actual serving temperature) but not in the Bisayan Filipino or Malayan sense of hot-cold categories. Certain herbs are believed efficacious in extracting heat or cold from one's body, but it is unknown if they are classified in this manner.

A Balangingi' with pneumonia, a cold disease, must not eat squid, shrimp, crab, and jackfruit; eggs may be consumed. However, for measles and chickenpox, both cold diseases, eggs are *sukang* and must be avoided. Since all of these three ailments are regarded as cold, more than the hot-cold concept must be involved to make eggs *sukanga*.

These Samal do not have any explicit beliefs that good health requires the balance of hot and cold elements in the body. Yet the implication of such an equilibrium exists since sickness often is the result of excessive heat or cold entering the body. These illnesses are cured by neutralizing the intrusive element. In other words, their beliefs do imply that the absence of an excess of hot or cold represents a normal, healthy person.

A partial similarity occurs between the *bisa* of Malays in Penang and the *sukang* of Balangingi'. For both Malays and the Balangingi' certain foods when eaten have a quality that aggravates the patient's ailment. *Sukang* cannot bring on disease, although it may complicate an illness or result in a more serious sickness. In the sense that *bisa* is similar to "allergy," i.e., can actually cause sickness, the two concepts are dissimilar. Unfortunately, the *bisa* concept in Malay traditional medicine was not thoroughly investigated. *Bisa* also appears to be an integral concept in the folk medicine of the Maranao Moslems; rabies is called by *bisa aso* [*aso*, dog] and venom, *bisa nipaia*. *Bisa* is used by the Balangingi' in its Malay sense of a poisonous or stinging bite.²³ However, our data on these concepts are too scanty to more than speculate on their possible generic relationships.

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23. Although Professor Carol Molony specifically inquired, she found the Moslem Yakans of Basilan island have no hot-cold classification of foods, herbs, and diseases or humoral pathology aspects associated with their traditional medicine.

This summary of the known contours of Moslem Filipino traditional medicine, with the exception of the Balangingi', does not indicate the presence of a humoral pathology or hot-cold dichotomy. A definite hot-cold syndrome appears among Balangingi' disease concepts, but humoral pathology aspects are more latent than manifest. Since Islam was introduced to Filipinos primarily by Arabs, and *sūfī* missionaries from Malaya, it is curious that an almost classic form of humoral pathology was passed on to the Malays during their Islamization but apparently not to Moslem Filipinos.

CHINESE AND VIETNAMESE MEDICINE

China itself and the Chinese residents of the Philippines and other Southeast Asian nations, are sources that Christian Filipinos may have utilized in creating their traditional medical system. The following pages do not attempt either a thorough description of Chinese medicine or investigate in detail possible external influences on its development. This brief summary was provoked by historical references to Chinese folk healers and medicine in the Philippines that bear considerable similarities to humoral pathology.

Parallels occur among the Hippocratic, Ayurvedic, and Chinese medical systems. The Chinese believe that animate and inanimate objects consist of five elements; to the Greek and Indian elements of earth, fire, and water, they added wood and metal.¹ The five element concept led to the development of an elaborate pseudoscience for each element was linked to a natural physiological process and specific internal organs.² Both blood and air (pneuma) was believed to flow through the body's vessels.

The Chinese also accepted the dualistic concept of Yang (male, warm, active, dry, positive, life) and Yin (female, cold, passive, moist, negative).³ Along with the five elements, Yang and Yin created, and existed in, all the phenomena of nature. These two forces, or positive and negative principles, had a mutual affinity and antagonism to each other.³

Health required both a harmonious equilibrium between Yang and Yin and a proper quantitative relationship among

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1. Fielding H. Garrison, *An Introduction to the History of Medicine with Medical Chronology, Suggestions for Study and Bibliographical Data* (Philadelphia: W. B. Saunders Co., 4th revised ed., 1929), pp. 74-75; Edward H. Hume, *The Chinese Way of Medicine* (Baltimore: Johns Hopkins Press, 1940), pp. 17-19.
 2. Ralph C. Croizier, *Traditional Medicine in Modern China: Science, Nationalism, and the Tensions of Culture Change* (Cambridge: Harvard University, 1968), p. 17.
 3. Gordon, *op. cit.*, p. 357.

the five elements^a The Yang-Yin balance was maintained by proper conduct, dietary rules, acupuncture^a etc^a Illnesses also resulted from exposure to hot and cold elements^a For example, the Chinese (like Lalawiganers) distinguished three varieties of beriberi: hot, cold, and cardiaca

Chinese foods and drugs were classified in numerous ways, including their quantity of Yang and Yin; the more Yang a substance possessed, the greater its healing powers. Therefore, food was one means by which the Yang-Yin balance could be upset or restored^a Certain drugs were prescribed to make up a deficiency of Yang or Yin, to aid the fire element against an excess of water, etc.^a

Needham believed there is little likelihood that Hippocratic principles diffusing directly from Greece to China.⁸ On the other hand, cultural exchange, including medical knowledge, occurred between the Arabs and Indians^a Kublai Khan supposedly introduced to China healing practices used by the Arabs^a including remedies recommended in Avicenna's *Ash-Shifa* but not his *Canon*.⁹ Maritime relations existed between the Persian Gulf^a area and Canton (the latter port was the main terminus of Arab trade) during the early Christian centuries^a⁰

After the Chinese were converted to Mahayana Buddhism, which advocated the Ayurvedic theory of four elements, numerous pilgrims from China visited India^a As early as the 3rd century^a B.C.^a Tsou Yen tried to amalgamate Chinese medical concepts with those he learned from Indian travelers.^a¹

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4. Croizier, *op. cit.*, p. 17.
 5. Hume^a *op. cit.*, p. 121.
 6. Gordon^a *op. cit.*, p. 377.
 7. Croizier^a *op. cit.*, pp. 20-21.
 8. Joseph Needham^a *Science and Civilization in China*, 4 vols. in 8 parts (Cambridge: Cambridge University^a 1962), 2, p. 246.
 9. Hakim Mohammad Said, *Medicine in China* (Karachi: Hamdard Academy, 1963), pp. 233-34^a
 10. Pierre Huard and Ming Wong, *Chinese^a Medicine*, translated from the French by Bernard Fielding (London: World University Library^a 1968)^a pp. 93-94^a
 11. *Ibid.*, p. 88.

I-tsing (Ching Wen-ming), Fa-Hsien, and Hsuan Tsang are some of the more notable Chinese monks who studied in India, between the 4th and 7th centuries, A.D. Later they translated Indian classics into their language. Considerable exchange occurred between the medical systems of these countries. For example, sphygmology (diagnosis of illness by the pulse) was borrowed from the Ayurveda by the Chinese.^{d²}

During the T'ang period Sun Szu-Miao (Souen Sseu-Mo) developed a medical system that was a compromise between the Indian and Chinese doctrines.

The disharmony of the five elements was rarely invoked as a pathological factor. After the diffusion of the India-Greek theory of the four elements by Buddhism, the disharmony of the latter often was invoked by the pathologists of the T'ang era. They made strange attempts to conciliate Indian and Chinese pathogenesis. Souen Sseu-Mo is very typical of this point of view.^{d³}

The Chinese could have introduced their medical knowledge (including derivatives from India) to Filipinos. Unfortunately, no research has been done on the relationships between Chinese and Filipino traditional medicine.

Vietnamese folk medicine, based extensively but not completely on Chinese traditional medical concepts, furnishes some insight into the adaptive process of borrowing in one Southeast Asian nation. Vietnamese folk medicine asserts that health depends on maintaining a balance of bodily elements. Cure of illness results when a disturbed equilibrium of these elements is restored. Many foods and sicknesses are regarded by the Vietnamese as hot or cooling in nature.^{d⁴}

In Vietnam pregnant woman avoid certain hot and cold foods to prevent upset of the body's balance of vital forces, making them "susceptible to every conceivable illness."^{b⁵}

12. Croizier, *op. cit.*, p. 90.

13. Pierre Huard and Ming Wong, "Structure de la Médecine Chinoise," *Bulletin de la Société des Études Indochinoises*, 33 (1957), p. 304.

14. Gerald Hickey, *Village in Vietnam* (New Haven, Conn.: Yale University, 1964), p. 57.

15. Richard Coughlin, "Pregnancy and Birth in Vietnam," in Hart, Rajadon and Coughlin, *op. cit.*, p. 228.

Today some Western drugs have been rejected by the Vietnamese since they "are 'hot' and have a dehydrating effect on the humor and on the blood."⁶ In Vietnam, as elsewhere in Southeast Asia, both Western and traditional medicines are used.⁷

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16. Harvey H. Smith and others, *Area Handbook for South Vietnam* (Washington, D.C.: U.S. Government Printing Office, 1967), p. 134.
 17. James B. Hendry, *The Small World of Khanh Hau* (Chicago: Aldine Publishing Company, 1964), p. 98.

CONCLUSIONS

Purpose

The primary purpose of this monograph has been to describe the humoral complex of the traditional medicine of Bisayan Filipinos and of Malays in Penango. Because of neglect of this topic, there is need for additional field data on this aspect of Southeast Asian culture in general, and of Christian Filipinos in particular.

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1. Recent studies of Filipino village life, that deal extensively with food, diet, folk medical beliefs, shamanism, and dietary practices, contain no data on the hot-cold complex or humoral pathology of disease and treatment: Ethel Nurge, *Life in a Leyte Village* (Seattle: American Ethnological Society, Monograph No. 40, University of Washington Press, 1965); Agaton A. Pal, "A Philippine Barrio: A Study of Social Organizations in Relation to Planned Cultural Change," *The University of Manila Journal of East Asiatic Studies*, 5 (1956), pp. 333-486; Francisco T. Aparece, "The Care of the Sick and the Burial of the Dead in the Rural Areas of Bohol and Their Education Implications" (Cebu City: M.A. thesis in Education, University of San Carlos, 1960); Richard Arens, S.V.D., "The Tambalan and His Medical Practice in Leyte and Samar," *The Philippine Journal of Science*, 86 (1957), pp. 121-30; F. Landa Jocano, "Cultural Context of Folk Medicine: Some Philippine Cases," *Philippine Sociological Review*, 14 (1966), pp. 40-48; Richard W. Lieban, "Qualifications for Folk Medicine in Sibulan, Negros Oriental, Philippines," *The Philippine Journal of Science*, 91 (1962), pp. 511-21; William F. Nydegger and Corrine Nydegger, *Tarong: An Ilocos Barrio in the Philippines* (New York: Six Cultures Series, Vol. 6, John Wiley and Son, Inc., 1966); Teodora W. Tiglao, *Health Practices in a Rural Community* (Quezon City: Community Development Research Council, Study Series No. 23, University of the Philippines, 1964); Leon Ma. Guerrero, "Medicinal Plants," in *Census of the Philippines* [1918] (Manila: Bureau of Printing, 1921), 3, pp. 747-87; Eduardo Quisumbing, *Medicinal Plants of the Philippines* (Manila: Bureau of Printing, Technical Bulletin 16, 1951); and Richard W. Lieban, "The Dangerous Inkgantoso Illness and Social Control in a Philippine Community," *American Anthropologist*, 64 (1962), pp. 306-12.

An additional object was to compare this feature of Filipino and Malay folk medicine with Asian and Latin American parallels, and to identify possible relationships. At the start of the project, we suspected that the Spaniards introduced the Bisayans to concepts of humoral pathology. However, there can be no doubt that diffusion to the Malay peninsula was directly by Arabs and indirectly by other Moslem South Asians when Islam spread into Southeast Asia.

Spanish Influence in the Bisayas

As the research proceeded, the original hypothesis that the humoral pathology of Bisayan Filipinos was part of their Spanish heritage became increasingly more viable. Although conclusive documentation is lacking, the weight of the evidence is that the basic humoral aspects of Bisayan traditional medicine probably were a cultural transmission of the Spaniards. Moreover, its diffusion via Mexico probably occurred during the early part of the Spanish colonial period in the Philippines.

Indian Influence in the Bisayas

It appears improbable that the humoral aspects of Bisayan folk medicine have an Ayurvedic source. The few trustworthy analyses of Indian cultural elements in the Philippines offer no clues that medical or disease concepts were among those diffused. Unfortunately, existing knowledge of the impact of Indian culture on Filipinos is hazy, if not contradictory. Cady, for example, maintains that Filipino cultural loans from India were "secondhand and superficial in character."² Yet Alfred Kroeber writes that not only was Indian cultural influence at its "most profound" in the coastal and lowland regions, but "There is no tribe in the Philippines, no matter how primitive and remote, in whose culture today elements of a Indian origin cannot be traced."³

2. Cady, *op. cit.*, p. 232.

3. Alfred L. Kroeber, *Peoples of the Philippines*, 2nd and rev. ed. (New York: American Museum of Natural History, 1943), pp. 15-16. The latest major study of Indian influence in the Philippines does not deal with the topic of this monograph: Juan R. Francisco, "Indian Influence in the Philippines: With Special Reference to Language and Literature," *Philippine Social Sciences and Humanities Review*, 27 (1963), pp. 1-310.

Most likely Cady is correct in that most Indian influence reached the Philippines through Southeast Asian intermediaries, whereas Kroeber probably is right in asserting that the totality of borrowed elements was not superficial. Although Filliozat states that Ayurvedic medical principle diffused widely from India to "Indo-China and Indonesia" no evidence was found that they were adopted by Christian Filipinos.

A recent study reports a negligible number of Sanskrit loan-words in Cebuan.⁵ The Cebuan words of known or suspected Sanskrit origin relate primarily to flora and fauna, parts of the bodies of animals, and secondarily to social institutions and relationships. No lexical borrowings associated with Ayurvedic concepts appear in Cebuan. Since information on the small contemporary Indian community in the Philippines is exceedingly scarce, it has been impossible to determine if Ayurvedic medicine is practiced today in the Philippines.

Islamic Influences in Penang and the Bisayas

The humoral pathology of the Penang Malays was largely borrowed directly from Arabs or Arabic sources and then locally adapted. Among all Southeast Asians only the Malays retain the traditional degrees of intensity of humoral elements. It was hypothesized that if the traditional medicine of Moslem Filipinos exhibited a pronounced humoral pathology, this might constitute evidence that diffusion of this aspect of Bisayan folk medicine to the Philippines began with the arrival of Islam in the 14th century.

Islamic Influence Among the Moslem Filipinos

Available information is that most of the major Moslem Filipino groups do not share such disease concepts. Only

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4. Filliozat *op. cit.*, p. xvii.
 5. José G. Kuizon, "The Sanskrit Loan-Words in Cebuano-Bisayan Language and the Indian Elements in Cebuano-Bisayan Culture" (Cebu City: M.A. thesis in Anthropology, University of San Carlos, 1962), pp. 118-19, 124. For critical comments on efforts to identify Sanskrit and Chinese loan-words in Philippine languages see William

among the Balingingih does a hot-cold dichotomy occur. However, the basic conceptualization of their folk medicine is dissimilar from that of either the Malays or Bisayan Filipinos.

Data on this subject are limited, for most anthropologists who have studied Moslem Filipinos have not concentrated on their folk medicine. New research may uncover examples of humoral pathology where they are now believed non-existent.

Chinese Influence in the Bisayas

Several quoted sources assert that Chinese medical specialists in the Spanish Philippines believed the maintenance of health required the harmonious balance of hot and cold elements in the body. These references probably refer to the Yang-Yin corpus of beliefs, among which was that good health requires the equilibrium of hot and cold. Unfortunately, no studies have been made of Chinese influence on Filipino folk medicine. Traditional Filipino medical complexes do not appear to have adopted any uniquely Chinese traits, such as acupuncture.

Although our knowledge of the Chinese element in Philippine languages is limited, Manuel's study of Chinese loan-words in Tagalog does not indicate any significant lexical borrowing of Chinese terms for diseases, drugs, equipment, etc. For example of 381 words he believes to have been adopted from the Chinese, only seven (1.8%) pertain to medicine or anatomy.

From a broader point of view, it can be seen that these [381] words have reference chiefly to the economic and social life--the occupational terms and names of foods representing the economic phases, and the kinship terms, majority of the action-words and terms referring to abstract qualities indicating the influence on the social life.^f

Henry Scott, *Prehispanic Source Materials for the Study of Philippine History* (Manila: University of Santo Tomas Press, 1968), pp. 55 ff.

6. E. Arsenio Manuel, *Chinese Elements in the Tagalog Language with Some Indication of Chinese Influence on Other Philippine Languages and an Excursion into Austronesian Linguistics* (Manila: Filipiniana Publications, 1948), p. 112a

Although the Chinese probably had some influence on Filipino folk medicine (Chinese medical preparations are still popular among the barriofolk), no convincing evidence was found that its humoral characteristics are of Chinese origin.

Indigenous Influences Among Bornean and Philippine Primitive Societies

What have been considered here to be intrusive aspects of Bisayan Filipino folk medicine may actually be indigenous. However, our search for indigenous humoral pathologies or hot-cold syndromes among Bornean and Philippine primitive (non-literate) societies was of limited success. As to some Borneans, this was found: they, and other primitive peoples, regard the universe "as sensitive to wrongdoing or to certain events. Under certain conditions the world may become 'hot' or 'sick.'"⁷ The Kelabit and Dusun of Sarawak and Sabah--and the Lovedu of South Africa--share this basic concept that the world becomes hot when certain events occur or certain mores are violated.⁸

The literature examined does not attribute to primitive Filipino societies a concept of automatic retribution that abnormally heats or cools the universe.⁹ Finally, our search revealed no Bornean or Filipino group whose folk medicine has humoral pathology features or that classifies foods, herbs, and diseases along a hot-cold continuum.

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7. John J. Honigsmann, *The World of Man* (New York: Harper & Brothers, 1959), pp. 640-61.
 8. E. J. Krige and J. D. Krige, *The Realm of a Rain-Queen* (London: Oxford University Press, 1943), p. 120. Among the Lovedu when a King dies, a woman dies during childbirth, or a person is struck by lightning, the world becomes so hot that rain is impossible. Symbolic "cooling" rituals are performed to restore the universe to its normal balance.
 9. A comprehensive search on this topic was not attempted in the available materials on primitive societies in Borneo and the Philippines. Some indication of the documentation available on a single Philippine group is illustrated by Harold C. Conklin, *Ifugao Bibliography* (New Haven, Conn.: Yale University, Southeast Asia Studies, Bibliography Series No. 11, 1968).

Parallels Between the Bisayas and Latin America

There are numerous similarities between Latin American and Bisayan humoral pathologies. In both Latin America and the Bisayas the same deviations from the classical humoral pathology occur. The qualities of wet and dry disappeared, and only hot and cold remained, whereas the degrees of intensity of these qualities were rarely retained in Latin America and, apparently, never in the Philippines. Both folk medical complexes also added a new taxonomic category (*templado* or *natural*)^a

These parallels between Latin American (especially Mexican) and Filipino traditional medical complexes appears partially explainable. In Latin America Spanish physicians, geographers, and natural historians classified the new flora and fauna according to their system. In 1570, for example, a number of Spanish physicians were sent by Philip II to collect information about New World medicinal plants and their uses; specimens and reports were to be forwarded to Spain.^{a0} "By the end of the 16th century a fair part of the indigenous pharmacopoeia had been recognized and the qualities of each item described according to the prevailing notions of hot, a cold, wet, and dry."¹¹

Some Spaniards, and especially the priests, took a deep interest in Philippine ethnobotany. "The early Spanish missionaries were keenly interested in medicinal plants and in folk medicine, and having none other, often used them on themselves [*sic*]."¹² Many New World medicinal plants were introduced by the friars and their known properties in Mexico were taught to Filipinos.^{d3} "More plants were brought from Mexico than from Spain, because the Philippines was administered through Mexico and had more contact with Mexico than with Spain."^{d4} Of 178 species of plants purposely or accia

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10. C. H. Haring, *The Spanish Empire in America* (New York: Oxford University Press, 1947), pp. 233-34.
 11. Foster, "Spanish-American Folk Medicine," pp. 203-204.
 12. Robert M. Zingg, "American Plants in Philippine Ethnobotany," *The Philippine Journal of Science* 54 (1934), p. 271.
 13. *Ibida*, p. 254.
 14. Teodoro A. Agoncillo and Oscar M. Alfonso, *A Short History of the Filipino People* (Quezon City: University of

dentally introduced to the Philippines from the New World, more than 100 were brought from Mexico by the Spaniards.¹⁵

The Spaniards started medical education in Latin America at an early date. In 1580 a chair in medicine was established at the University of Mexico. By 1638 the University of San Marcos, Peru, had begun medical training. "Hippocrates, Galen, Avicenna, and other authorities of the Classic and Arabic periods were the basic sources of this teaching."¹⁶ However, "Medical education in the colonies . . . even in early Bourbon times had advanced little beyond the concepts of Hippocrates, Galen, and Avicenna. . . ."¹⁷ In fact, humoral pathology continued to be taught in Mexican medical schools until the middle 18th century.

During the time the Philippines was governed as a dependency of the Vice-Royalty of New Spain, no medical schools were founded in the archipelago. To study medicine during this period, one had to go to Mexico at great expense because of the long journey; moreover, in these ancient Islands belonging to the Occident there were but a few physicians who came from the mother country.¹⁸ Presumably humoral pathology concepts were transmitted to the Philippines by those physicians trained in Mexico. The first Philippine medical school was not established until 1871, as part of the University of Santo Tomas, in Manila.

Both Latin America and the Philippines suffered from an acute shortage of physicians. In Latin America "In view of the relative lack of doctors, priests and other educated individuals were called upon to help the sick to a degree probably not characteristic of Spain. The same shortage of doctors stimulated the publication of guides to home curing;

the Philippines Press, 1960), p. 85. "The prominence of Mexican plants in the American element of the ethnobotany of the Philippines is noteworthy. This resulted from the continuous contacts of the Islands and Mexico in the long trade monopoly between Acapulco and Manila from 1600 to 1820." Zingg, *op. cit.* p. 260.

15. Robert B. Fox, "The Pinatubo Negritos: Their Useful Plants and Material Culture," *The Philippine Journal of Science* 81 (1953), p. 193.
16. Foster, "Spanish-American Folk Medicine," p. 204.
17. Haring, *op. cit.* p. 234.
18. Bantug, *op. cit.* pp. 121-22.

one of the most interesting dates from 1771. . . a.¹⁹ In the Philippines the priests "in the absence of trained physicians . . . could not very well neglect the physical wellbeing of their parishioners."²⁰ Father Clain's tract on medicinal plants in the Philippines and their therapeutic uses was published in 1712.

During the first part of the Conquest era in Latin America, the sick were attended mainly by Spanish priests.

So it was the clergy who were chiefly responsible for introducing and promulgating Spanish concepts of medicine among the natives and persuading them to accept alien standards.²¹

In the Philippines the priests appear to have been equally active as medical therapists. They were also much interested in local ethnobotany. It is believed they were the main agents for diffusing, among rural Filipinos, the Spanish medical concepts, from either Mexico or such urban centers as Manila or Cebu.

The priest was *the* representative of the Spanish crown in most Filipino villages. He lived permanently among the peasants and learned their languages. In addition to his religious duties and authority, he supervised and controlled local elections, was in charge of education, charities, and social welfare, served as the tax inspector, arbiter of morals as well as censor of books and entertainment.²² In addition, the "Friars with some medical knowledge often undertook hazardous expeditions to isolated hamlets. Their commendable attempts to succor stricken Filipinos gained many converts and settlers."²³

19. Foster, "Spanish-American Folk Medicine," p. 204.

20. Bantug, *op. cit.*, p. 11.

21. Gordon Schendel, *Medicine in Mexico: From Aztec Herbs to Betatrons* (Austin: University of Texas Press, 1968), p. 86.

22. Gregorio F. Zaide, *The Philippines: Since the British Invasion* (Manila: R. P. Garcia Publishing Company, 1949), p. 163.

23. Robert T. Reed, "Hispanic Urbanism in the Philippines: A Study of the Impact of Church and State," *The University of Manila Journal of East Asiatic Studies* 11 (1967), p. 44.

To overcome the shortage of priests and other administrators, and to facilitate taxation, government, conversion, and religious education, the Spaniards encouraged, sometimes coerced, Filipinos to abandon their scattered, isolated villages. When successful, these uprooted Filipinos were resettled in larger population centers called *cabecerías* later to evolve into the *poblaciones*.²⁴ In these towns, especially the larger ones, Spanish military and administrative officials and the parish priests often resided. These denser settlements facilitated the introduction and spread of new concepts among a larger number of Filipinos. Many of these towns probably served as relay stations for innovations introduced first into Manila.

In partial summary: until the latter part of the 19th century, Philippine residents had to obtain their medical education abroad, almost invariably in Mexico. Until the middle of the 18th century, new physicians returning to the Philippines from Mexican medical schools were thoroughly instructed in the principles of humoral pathology.

Spaniards, particularly the priests, in both Latin America and the Philippines, enthusiastically identified and classified the new flora and fauna of these areas. "Because of the great variety of species and their diverse therapeutic actions, Philippine medicinal plants attracted at once the attention of the early missionaries who devoted much time and effort to a systematic study of them."²⁵ No precise evidence was found that Philippine plants were classified by hot-cold notions, as in Mexico, but, under the circumstances, it seems a reasonable assumption that such was the case.

It is believed that the priests in the Philippines were the main mediators between this segment of the Great and Little Traditions. Few physicians other than priests resided among the peasants, whose poverty and illiteracy prevented any extensive home use of printed first-aid tracts (Their contents, of course, could have been orally diffused.) The priests, and perhaps a few other Spaniards, remain the most logical means by which these medical concepts would have been transmitted among the villagers. Their enormous prestige, as Spaniards, would have favored Filipino acceptance of new disease concepts and healing techniques.

Several fleeting glimpses of this process are reflected, if indirectly, by fragments found in the sources investigated.

24. Phelan, *op. cit.* pp. 44 ff.

25. Bantug, *op. cit.*, p. 11.

For example, one early friar naively wrote thatn". . . it is in their superstitions that they [*Indios* or *Filipinos*] most show their savagery. They think that disease is caused by the flight of the spirit, whereas all intelligent men know that sickness is caused by fluctuations of the humors."²⁶

Humoral pathology concepts appeared in locally printed materials on Philippine ethnobotany. Father Santa Maria's book (1768) described 208 local herbs and their medical uses. He cautiously comments that one must know the qualities of each herb for they are not equally effective for every illness. Medicinal plants must be administered with knowledge of the age of the patient and of the various humors that compose the human body ("*de la variedad de humores de que se compone el cuerpo humano*").²⁷ However, despite the foregoing, Foster's statement for Latin America also applies, at least for the present, to the Philippines: "The mechanisms whereby university medical beliefs and practices filtered down to the folk level can only be surmised."²⁸

It is apparent that medical ideas and practices have been circulating, at the Great Tradition level, for many centuries within (and without) the "ancient *oikoumenê*" Kroeber shifted the meaning of the *oikoumenê* from the Greeks' definition of the "'range of mankind'" to the "'range of man's most developed cultures.'"²⁹ Within thisn". . . great web of culture growth, extensive in area and rich in content . . . inventions or new cultural materials have tended to be transmitted, sooner or later, from end to end."³⁰

26. Zingg, *op. cit.*, p. 271.

27. R. P. Fr. Fernando de Santa Maria, O.P., *Manual de Medicinas Caseras Para Consuelo de los Pobres Indios en las Provincias y Pueblos Donde no Hay Medicosani Botica* (Manila: Imprenta de Sto. Tomas, 1815). The first edition was published in 1768; this book, however, was translated into various Philippine languages. Bantug, *op. cit.*, pp. 14, 163.

28. Foster, "Spanish-American Folk Medicine," p. 204.

29. Alfred L. Kroeber, "The Ancient *Oikoumenê* as an Historic Culture Aggregate," *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 75 (1945), p. 9.

30. *Ibid.*, p. 17. Some ideas developed in the following section were first suggested by Professor Leslie in personal correspondence.

The classical concept of humoral pathology, originating among the Greeks, was diffused by the Arabs to Spain and Southeast Asia (Malaya). The Spaniards were to carry this medical complex to the New World; and, on the basis of present evidence, they probably brought the system to the Philippines. Available information on the exact indebtedness of Ayurvedic medicine to the Greeks is disputed, although some mutual exchange of medical ideas occurred between the Greeks and Indians. From India Ayurvedic concepts diffused to parts of Europe, Eastern and Southeast Asia. A sharing of Arabic and Indian medical ideas with the Chinese, and the latter with Southeast Asians, occurred, but present knowledge on this subject is too limited to permit more than informed speculation, especially at the Little Tradition level.

However, many fundamental ideas utilized by these "classic" medical systems were common to the ancient *oikoumenê* (and also outside its sphere), e.g., macrocosm/microcosm analogy of the body to the universe; opposing qualities such as hot/cold or male/female; wet/dry in balance and sickness resulting from their disequilibrium; and beliefs that intense emotions cause unhealthy imbalances of bodily elements. In the process of accepting and adapting humoral pathology concepts of the Greeks, Arabs, Indians, and Chinese, by *oikoumenê* societies, these Ur-ideas both facilitated adoption and modified the original and more integrated systems, resulting in unique configurations of traditional folk medicines.

Kroeber excluded the New World from the *oikoumenê*. He wrote that

. . . of the story of major civilizational growth in America . . . gives no indication of integrating with the corresponding story in Eurasia. The two are not, so far as we can see, parts of a single plot. Resemblances are either analogies instead of homologies; or, where they are the latter, they are also *disjecta membra*.³¹

The diffusion of humoral pathology to Latin America can fairly be described, in this regard, as *disjecta membra* of the *oikoumenê*. Southeast Asia, of course, is part of the *oikoumenê*.

31. *Ibid.* p. 19.

FUTURE RESEARCH NEEDS

It is believed possible to trace with greater precision than has been done elsewhere, or in this Data Paper, the spread of many of these medical ideas at the Great Tradition level in the *oikoumenê*. Few attempts have been made to demonstrate how medical ideas of the Great Tradition penetrated the Little Tradition, either in the New World or Asia. In both instances, new research, in the field and the library, are required. Yet these cultural reconstructions will always be handicapped by the impossibility of locating all the sources and paths of diffusion of such notions as hot-cold or macrocosm/microcosm. These concepts presumably pre-date Greek, Indian, Arabic, and Chinese medicine and certainly were partly integrated into them.

This exploratory study has provided a preliminary charting of the origin and spread of these clustered medical concepts in Southeast Asia. Extension, refinement, and correction is both possible and desirable.

The one proper foundation of all broader studies in ethnology as in history is the precise, intimate, long-continued examination of the culture of an area or a period. It is only upon such detailed examinations that sound comparisons and wide inferences may legitimately be based.

For example, available evidence in fugitive sources makes it possible to be more precise than some scholars have been regarding the extent to which Burmese or Thai folk medicine have borrowed from Ayurvedic concepts. Increased knowledge of the shared medical system of the *oikoumenê* gives new significance to innocent statements, made by a Burmese author, that among her people "medicine and food are closely related" or that usually a "cooling mangosteen is eaten after the heating durian."

1. *Ibid.*, p. 9.

2. Mi Mi Khaing, *Burmese Family* (Bloomington: Indiana University Press, 1966), p. 138.

Greater familiarity with these *oikoumenê* cultural elements would have lessened Nash's "confusions" and "puzzlement" about the conceptualization of Burmese folk medicine. That he had earlier done research on traditional medicine in Mexico and Guatemala makes his initial difficulties in grasping the rationale of Burmese folk medicine harder to understand.³

Urgently needed is greater scholarly attention to the complexities and rationale of indigenous Southeast Asian medical complexes, and their interrelationships with intrusive Euroamerican and Asian disease concepts and curing techniques. An example of interrelationships is that some college-trained practicing physicians and college-trained nurses in Dumaguete have incorporated aspects of the hot-cold dichotomy into their belief systems.

Leslie writes that equally little concern has been shown for the similar hot-cold complex in South Asia. "These ideas are casually mentioned in anthropological studies, where the concern is usually with the ritual significance of food."⁴ Yet Opler, in describing village India, reports that a "very large percentage of cases of imbalance and sickness are attributed to faulty diet and are considered capable of being adjusted by strict nutritional controls."⁵ Leslie underlines the urgent need for research to ". . . explore the range and distribution of conceptions of 'hot' and 'cold' foods and [to] show how dietary notions combine with other ideas to form an area-wide pattern of humoral theories within which regional, class, urban, and rural variations are recognizable."⁶

Research along these and other lines for the Philippines, if not for Southeast Asia in general, is badly needed and will open new and illuminating vistas. Such investigation will enhance existing knowledge of the nature of traditional medicine, interaction between the Great and Little Traditions, problems of introducing scientific health concepts and practices to Asian peasants, the linkage between culture and diet, and the *oikoumenê*, possibly world-wide distribution, of such notions as the hot-cold dichotomy and humoral pathology concepts. In the past these ideas frequently

3. Nash, *op. cit.*, pp. 192-93.

4. Leslie, *op. cit.*, p. 36.

5. Morris E. Opler, "The Cultural Definition of Illness in Village India," *Human Organization*, 22 (1963), p. 33.

6. Leslie, *op. cit.*, p. 36.

have been discussed as if they were a distinction of a particular culture or regiona

This monograph has discussed issues that require more extensive research of existing published sources before their resolution is possiblea Field investigation is essential for other problems since the required data are unavailable. The new information in this study on these features of Bisayan Filipino and Malayan traditional medicine is an initial if modest contributiona Some topics that were only superficially explored in this Data Paper may raise questions incapable of solution for they require the researcher to enter the perilous slough of cultural reconstructions of the ancient pasta However, Filliozat's *The Classical Doctrine of Indian Medicine* is a brilliant example of what is possiblea

Humoral concepts obviously are viable aspects of the ideas man in both hemispheres has developed and continues to accept about the nature, cause and treatment of illnessa Humoral pathology and the hot-cold syndrome is fundamental to traditional Latin American medicine. In village India today Ayurvedic medicine is about the only medical relief available to most villagers.7 Humoral concepts have wormed their way into the medical beliefs of some contemporary, western-trained Filipino physicians for several practicing in Dumaguete claimed aspirins are cold and antibiotics are hot medicinesa Finally, a recent questionnaire survey of medical practices in the rural Philippines found that a few ". . . physicians apparently accept ideas about witchcraft, sorcery or other folk beliefs as evidence by their answers.8a

Scientific medical knowledge and practices often come into conflict with traditional medicine, limiting the acceptance of modern medical servicesa

Under these circumstances, education is a two-way processa Not only is the spread of scientific information about health and diseases to the populace necessary; also, thorough understanding of the local, social and cultural milieu by medical personnel is required if they are to face the public health problems in their respective areas realistically.9

7. Opler, *op. cit.* p. 33.

8. Richard Lieban [and Dr. Amanda V. Valenzuela], "A Study of Medical Practices in the Philippines," *Acta Medica Philippina* 16 (1959), p. 35.

9. *Ibid.* pp. 35-36.

Medical anthropology faces an admittedly formidable yet equally crucial challenge in studying, describing, and analyzing more thoroughly the humoral pathology aspects and hot-cold syndrome of folk medicine, certainly in the Philippines if not Southeast Asia as a whole.

APPENDIX

Key for Interpretation of Tables 1-3

Tables 1-3 required the data be coded for tabular presentation. The code used is:

- Sam = Samaran (Lalawigan).
- Ceb = Cebuan (Caticugan)◦
- Pan = Panayan (data collected by Bernardo in Iloilo and Negros Occidental provinces and by Jocano in Barrio Tuburan, Panay)◦
- Tag = Tagalog (data obtained from Tagalog informant and collected by Jocano in Barrio Santolan)◦
- + = Unanimous classification by informants.
- * = Classification differed among informantso
- x = Classification for Tuburan (Panayan) and Santolan (Tagalog)◦
- +x or *x = Classification of both Bernardo's informants (+oro*) and the residents (x) of Tuburan (Panayan) or Tagalog informant(*) and residents (x) of Santolan (Tagalog).
- y = Young.
- m = Mature.
- w = Wild or non-domesticated.
- # = A banana variety.

Classifications in the second Cebuan column were furnished by Mro Gaabucayan, based on his research in a Cebuan barrio about eight miles northeast of Cagayan de Oro, Northern Mindanao. He reported no regular categories, hence there is only one column for Cebuan under "Regular." Also see Samuel Gaabucayan, "Folk Medicine of Barrio Agusan (Cagayan de Oro, Philippines), and Its Development Implications" (Cagayan de Oro: M.A. thesis in Folklore, Xavier University, 1969)◦ Data for the Tagalog column, in addition to that collected by Jocano in Santolan, were obtained in 1969 by Professor Scheans in the Philippines. He interviewed a young Filipina who learned these classification from her Manila-born maternal grandmother who speaks both Tagalog and Spanish.

Table 1

Bisayan (and Tagalog) Classification of Foods by Hot-Cold Principle

Items	Hot					Cold					Regular			
	Sam	Ceb	Ceb	Pan	Tag	Sam	Ceb	Ceb	Pan	Tag	Sam	Ceb	Pan	Tag
<u>Meat</u>														
Carabao	+	+	*	+	*X									
Chicken	+	+	*						X	X			+	*
Eggs		*					*				*	*		*
Cow		*			*	+	*	*	X	X		*	+	
Deer ¹						+	+	*						*
Dog		+	*		X									*
Duck	*					*	+	*	X	X	*		+	*
Fish ²		*		*X	X		*		X		*	*	*	*
Goat				X	*X	+	*	*	+			*		
Horse	*	*	*	+X	*X	*	*					*		
Pig ³	+	*	*	*X			*	*	*XW				*	*
Sheep					*		+	*	+					
Turkey	*	*					*	*	X	X	*		+	*
Turtle (sea)						+	+		+					*
<u>Vegetables⁴</u>														
Ampalaya ⁵	+	+		+				*W		*X				
Balibaran	*	+				*								
Cabbage							+		*		+		*	*
Calabong	+	*					*			*				
Camotes (& leaves)	*	*	*	+	X		*			X	*	*		*
Carobasa (squash)	*	*		+		*	*	*						*
Corn	*	*	*	*							*	*	*	*
Cucumber						+	+	+	+	*				
Dawa (millet)	*	+				*								*
Eggplant		*				+		*	*					*
Gabi (taro)	*	*		*			*	*			*		*	*
Ganda	*	+				*								*
Ginger	+	+		+				*		*				
Kalamuñgai		+	*	X		+								*
Kasoy (cashew)	+						+	*		*				
Mongo beans	*	+	*	+X	*X									
Pako (fern tips)						*	+				*			*
Palauan	*	+	*	+		*								*
Peanuts	+	+		+						*				
Pechay						*		*			*	+	+	*
Pili nuts	+	+		+										*
Rice				*				*			+	+	*	*
Rice (glutinous)	+	+		+										*
Siqua		*					*					*		*

1. In Barrio Agusan deer is "very cold."
2. In Tuburan and Santolan most sea fish are regarded as hot, whereas all fresh-water fish, except the *pantat* and catfish, are cold. All fish that bleed when cleaned are hot.
3. In both Tuburan and Santolan pork is regarded as cold, whereas its fat is hot.
4. "Both Bisayan [Tuburan] and Tagalog [Santolan] housewives are in agreement that most vegetables and fruits are cold. . . . There are some vegetables and fruits, however, which are equally recognized as hot." Jocano, *op. cit.*, p. 11. Young leaves of ampalaya and camote are cold.
5. Wild ampalaya is called *Rabaring*.

Table 1 (continued)

Items	Hot					Cold					Regular			
	Sam	Ceb	Ceb	Pan	Tag	Sam	Ceb	Ceb	Pan	Tag	Sam	Ceb	Pan	Tag
<u>Vegetables (cont.)</u>														
Stringbeans ⁶						+		*			+			*
Tabiyong							*				*			*
Tomatoes						+	*	*		*	*			
Ubi	+	+											+	*
Upo	+	*					*							*
<u>Fruit</u>														
Avocado						+		*	x	*x	+			
Aldaba #	+						+							*
Âtis			*			+	+		+x	*				
Banana ⁷					*y	*y		*	xm		*		+	
Bo-agas #						+	+							*
Bongoran #	*					*	+							*
Bubua					*	*	+				*			
Benotig #					*						+			
Canara #					*	+								
Cantaloupe					*	+	+							
Coconut	+m	*m		xm		*y	*m		+xy	*m	*y			
Coconut "milk"	+									*				
Coconut "water"	+	+								*				
Galangan ⁸						+	+		+					*
Guava			*			+			x	*		+		
Guayabáno (soursop)						+	+		+	*				
Igót	*	+				*					*			*
Jackfruit			*	+		+	+		x	*				
Kaimito						+	+		+	*				
Kolo #											+			
Lingkod #						*	+				+			*
Makopa						*	+		+	*	*			
Mango		*	*	x		+	*		+xy	*				
Mangoripon #						+	+							*
Papaya	*		*			*	*		+x	*		*		
Pineapple			*			+	+		+	*				
Podikit #					*	+	+							
Sab-a #			*				*			*	+	*		
San Pablo #		*								*		*		
Suha		*				+	*		+	*				
Tabolilid					*	+	+							
Tambis			*		*	*	+		+		*			
Tenumbaga						+	+							*
Tindok #	+	*					*							*
Todlo binokot #						+	+							*
Watermelon						+	+	*	+	*				
<u>Beverages</u>														
Beer	+	+		+						*				
Chocolate	+	+		+x						*				
Coffee	*	+		+x	*x	*								
Rum		+								*				
Soft drinks	*	*				*	*			*	*	*	+	
Tuba	+	+		+										*

6. Jocano states that "beans" are considered hot in Tuburan and Santolan.

7. In Barrio Agusan bananas (*bululan*, *lakatan*, *tundan*, *morado*, etc.) generally are regarded as cold except the *sab-a* and *kantong* varieties that are hot. Some listings do not distinguish between the classification of green and ripe bananas.

8. Known as *kiring* in eastern Samar.

Table 1 (continued)

Items	Hot					Cold					Regular			
	Sam	Ceb	Ceb	Pan	Tag	Sam	Ceb	Ceb	Pan	Tag	Sam	Ceb	Pan	Tag
<u>Condiments</u>														
Salt	*	+				*			+					*
Sugar ⁹	*	*	*			*	*					+		*
Vinegar	*	+				*			+					*
<u>Other</u>														
Candy	*					*				*				

9. Sugar cane (Barrio Agusan).

Table 2

Classification of Ocean Fish by the Hot-Cold Principle, Frequency of Catch, and Class in Caticugan and Siaton

Names	Hot					Cold			Regular					Frequency of Catch			
	A	B	C	D	?	A	B	C	A	B	C	D	?	I	II	III	?
Andohao (Japanese Mackerel)+									*					*			
Bangkolan (Skipjack)+									*	*	2			*			
Bangsi (Flying fish)+			*	*												*	
Badlon (Golden Pampano)+	*															*	
Baloh (Gar)+			*					*							*		
Budlisan			*											*			
Hinok												*					*
Ihalason (Tuna)				*	*									*			
Malanangsi					*												*
Malapati (Silverside)+									*	*				*			
Mampahan													*				*
Managat (Red Snapper)+													*				*
Panit (Yellowfin Tuna)+	*	*												*			
Tangingui (Spanish Mackerel)+								*	*						*		
Titina (similar to Tulingan or Tuna)					*												*
Iho (Shark)+					* ³											*	

1. A (first), B (second), C (third), and D (fourth) indicate class of fish based on its desirability as a food. Question mark means this fish's class is unknown. I (frequently), II (infrequently), and III (rarely) indicate the frequency of catch of these fish in southern Negros waters. Question mark means frequency of catch is unknown. Fish with + are scientifically identified in Hart, *Securing Aquatic Products*, pp. 54-55, 67-68.
2. Informants classify some fish differently so two classes are given
3. Iho, or shark, should be classified as E, the poorest type of eating fish.

Table 3

Bisayan Classification of Medicinal Flora
by Hot-Cold Principle¹

Items	Samaran			Cebuan			Panayan	
	H	C	R	H	C	R	H	C
Abaká (Manila hemp)			Su					
Agbai				L	L			
Albótra				R				
Alibhon								L
Amorsiko (Love grass)		R						
Antulanga					F1			
Atis (sweetsop)		L			L			
Badyang	R,L	R,L						
Banabá		L				L		
Banana		Su,St		Sa	Sa			
Bayonbayon					B,R			
Buri				Sa				
Busikad				F1		F1		
Buyo (Sama Dapon)		L					*	
Caballero (Paradise flower)				B				
Cachubong								*
Dalapot				L				
Dalupang					F1			
Dapdap		B						
Dáwa (millet) ²				Sea				
Estewetes								*
Gabi (taro)		L						
Ganda nga yapi		L						
Guava		L						
Guayabáno (soursop)		L						
Hilbas				*				
Igót		L	L					
Kalingag (Sama Kaningag)	B,R			B				
Kapok		L			B			
Kasla (Sama Tubâ sanglay)		L						B

1. Code: B (bark); Bu (bulb); F (fruit); F1 (flower); R (root); Sa (sap); Se (seed); St (stalk); Ste (stem); L (leaf); anda* (part of plant used is unknown). H is hot, C is cold, and R is regular. No regular category was reported for the Panayan classification.

2. Dawa has no medicinal use in Lalawigana.

Table 3 (continued)

Items	Samaran			Cebuan			Panayan	
	H	C	R	H	C	R	H	C
Kógon	R		L	Ash		Ash		R
Labnog					L			
Langka (Jackfruit)	L	L						
Lanzone		L						
Limón	B, F	B, F	F					
Lomboy								B
Malagaya				Se				
Mansanilla		L					*	
Marok-bárok	B	L						
Mayana					*			
Panigbin		L, F, R						
Pasau								L
Rosas						R		
Salay						R		
Salingakapa				*		*		
Santól		B						
Sentimento				R	L			
Sibukao		Ste			R, B			
Siempre viva		L						
Silhig						R		
Suha		F, L, R						
Tabolilid		F1						
Tabon Hangin				Se		Se		
Talikod					*			
Tambis		L						
Tanglad (Lemon grass)	L	L						
Tanmanan	Bu	L						
Tobacco	L	L						
Tubli		R						
Uli-on						R		
Wheat	Se, R			Se				
Yerba buena (Sam. Herba buena: Mint)		L						

Table 4
Bisayan and Tagalog Hot-Cold
Classification of Illnesses

Illnesses	Samaran		Cebuan		Panayan		Tagalogò	
	Hot	Cold	Hot	Cold	Hot	Cold	Hot	Cold
Beri-beri	-	*	-	*	-	*	-	*
Boils	*	*	*	-	*	-	*	-
Diarrhea-dysentery	*	-	*	-	*	-	*	*
Fever	*	-	*	-	*	-	*	-
Flu-colds	*	*	*	*	-	-	*	*
Headache	*	*	*	-	*	-	*	-
Malaria	*	-	*	*	-	*	-	-
Mumps	*	-	-	*	-	-	-	-
Rheumatism	*	*	-	*	-	*	-	*
Skin diseases	*	-	*	-	*	-	* ²	-
Smallpox	*	-	*	-	-	-	-	-
Stomach-ache	-	*	-	*	-	-	-	-
Tuberculosis	*	-	*	-	*	-	-	*

1. Jocano, "Cultural Perception of Food," p. 10.

2. Includes only skin ulcers, athlete's foot, and a type of scabies.

Table 5

Malay (Telok Kumbar, Penang) Classification of Foods
by the Hot-Cold-Regular Principle, Angin and Bisa

Items	Hot	Cold	Regular	Angin	Bisa
<u>Vegetables</u>					
Bean curds (<i>Takua</i>)		*	*		
Bean sprouts (<i>Tauge</i>)		*	*		
Cabbage (<i>Kubis</i>)	*	*	*		
Carrot (<i>Lobak merah</i>)		*	*	*	
Chili pepper (<i>Chabai</i>)	*				
Garlic (<i>Bawang puteh</i>)		*			
Kangkong (aquatic morning glory)	*	*			
Onion, white, large (<i>Bawang besar</i>)	*		*	*	
Peanut (<i>Kachang tanah</i>)	*		*	*	*
Peas (<i>Kachang i'jau</i>)		*			
Rice (husked, <i>beras</i> , cooked, <i>nasi</i>)			*		
Rice, glutinous (<i>Pulut</i>)	*				*
Spinach (<i>Bayam</i>)	*	*	*		
Sweet potatoe (<i>Ubi kěleddek</i>)		*	*	*	
Tapioca (<i>Ubi kayu</i>)		*	*	*	
Tomatoe (<i>Buah tomato</i>)		*	*		
White potatoes (<i>Ubi běnggala</i>)			*		
<u>Fruits</u>					
Apple		*	*		
Banana (<i>Pisang</i>)		*	*		
Chempedak (like jackfruit?)	*		*		
Chiku (Sapodilla)		*	*		
Chocolate	*	*			
Coconut (<i>Nyiur</i>)		*			
Coconut meat (Young nut)		*			
Coconut meat (Mature nut)		*			
Coconut "water" (<i>Ayer nyiur</i>)		*			
Coconut "milk" (<i>Santan</i>)		*			
Durian	*			*	
Grapes		*			*
Guava (<i>Jambu</i> , general name)		*			
Jackfruit (<i>Nangka</i>)		*		*	*
Lanzones (<i>Langsat</i>)		*		*	*
Mangosteen (<i>Manggis</i>)		*			
Orange (<i>Limau manis</i>)		*	*		
Papaya (<i>Papaw</i>)	*	*			
Rambutan	*				
Setiai (?)		*	*	*	
Sugar cane (<i>Těbu</i>)	*	*	*		

Table 5 (continued)

Items	Hot	Cold	Regular	Angin	Bisa
<u>Meats and Eggs</u>					
Bat (<i>Kelawar</i>)	*				
Beef	*	*		*	
Chicken (<i>Ayam</i>)	*				
Cockles (<i>Kĕrang</i>)		*	*		
Crabs (<i>Kĕtam</i>)		*			*
Eggs, chicken	*		*		*
Eggs, duck		*	*	*	*
Fish (<i>Ikan</i>) ¹	*	*	*		
Goat (<i>Kambing</i>)	*		*		
Milk (Cow)		*			
Pigeon		*			
Sea clams (<i>Siput</i>)		*			
Shrimp and prawn (<i>Udang</i>)		*			*
Squid (<i>Sotong</i>)		*			
Water buffalo	*				
<u>Spices</u>					
Coriander (<i>Ketumbar</i>)			*		
Nutmeg			*		
Pepper, black (<i>Lada hitam</i>)	*	*			
Salt (<i>Garam</i>)			*	*	
Sugar, brown (<i>Gula merah</i>)		*			*
Sugar, rock (<i>Gula batu</i>)		*			
Sugar, white (<i>Gula putih</i>)	*		*	*	
<u>Others</u>					
Flour, wheat	*	*	*		
Flour, rice			*		
Honey	*	*			
Water			*		

1. Classification of fish depends on the variety.

Table 6

Hot and Cold Sicknesses in Telok Kumbar, Penang

Sicknesses	Hot	Cold
Bronchitis (<i>Děmam sějok</i>)		*
Chickenpox (<i>Champak besar</i>) ¹	*	
Childbirth		*
Cough (<i>Batok</i>) ²		*
Diarrhea ³	*	
Elephantiasis (<i>Untut</i>)	*	
Fever (<i>Děmana</i>)	*	
Flu (<i>Děman</i>)	*	
Fracture		*
Ulcer (<i>Běra</i>) ⁴	*	
Malaria (<i>Děmam kūra</i>) ⁵	*	
Rheumatism (<i>Urat</i>) ⁶		*
Skin disease called <i>kayap</i> ⁷	*	
Smallpox (<i>Champak besar</i>)	*	
Sprains and dislocations		*
Tuberculosis (<i>Batok kering</i>)	*	
Typhoid (<i>Champak kěchil</i>)	*	

1. *Champak* is measles and *besar* big.

2. One should avoid some hot foods

3. A young patient may eat some hot foods but an adult may not.

4. A few hot foods may be eaten *Běra* also means boil.

5. Malaria is also called *děmam tulang*; *kura* is defined as spleen, and *děman kura*, as ague. However, the term in the table is the one given by the villagers.

6. *Urat* is also defined as nerve, vein, or muscle.

7. *Kayap* is said to be herpes and shingles

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